

Monthly Current Affairs for Defence Exams

January 2019



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Kashmir Stag (Hangul)

- Recently it is found that Kashmir Stag has begun using an old migratory route has given fresh hope to conservationists.

Kashmir stag

- The Kashmir stag, also called hangul, is a subspecies of elk native to India.
- It is found in dense riverine forests in the high valleys and mountains of the Kashmir Valley and northern Chamba district in Himachal Pradesh.
- In Kashmir, it's found in the Dachigam National Park where it receives protection but elsewhere it is more at risk.
- Earlier believed to be a subspecies of red deer, a number of mitochondrial DNA genetic studies have revealed that the hangul is part of the Asian clade of the elk.
- It is the state animal of Jammu and Kashmir.

Distribution and ecology

- This deer found in dense riverine forests, high valleys, and mountains of the Kashmir valley and northern Chamba in Himachal Pradesh.
- In Kashmir, it's found in the Dachigam National Park (at elevations of 3,035 meters), Rajparian Wildlife Sanctuary, Overa Aru, Sind Valley, and in the forests of Kishtwar & Bhaderwah.

Dachigam National Park

- The Dachigam National Park (DNP) is located at Umari district in Jammu and Kashmir (J&K).
- The main animal species that Dachigam is known for is the hangul (or the Kashmir stag).
- Other species include Musk deer, Leopard, Himalayan serow, Himalayan grey langur, Leopard cat, Himalayan black bear, etc.

Centre extends AFSPA in Nagaland

- Recently, the entire State of Nagaland has been declared 'disturbed area' for

six more months, till June 2019, under the controversial AFSPA.

- AFSPA empowers security forces to conduct operations anywhere and arrest anyone without any prior notice.
- Article 355 of the Constitution of India confers power to the Central Government to protect every state from internal disturbance.

Related Information

Armed Forces (Special Powers) Act

- Armed Forces (Special Powers) Acts (AFSPA), are Acts of the Parliament of India that grant special powers to the Indian Armed Forces in which each act terms "disturbed areas".
- According to The Disturbed Areas (Special Courts) Act, 1976 once declared 'disturbed', the area has to maintain the status quo for a minimum of 3 months.
- One such Act passed on September 11, 1958, was applicable to the Naga Hills, then part of Assam.
- In the following decades it spread, one by one, to the other Seven Sister States in India's northeast (at present it is in force in Assam, Nagaland, Manipur excluding Imphal municipal council area, Changlang, Longding, and Tirap districts of Arunachal Pradesh).
- Another one passed in 1983 and applicable to Punjab and Chandigarh was withdrawn in 1997, roughly 14 years after it came to force.

History

- The Armed Forces Special Powers Ordinance of 1942 was promulgated by the British on 15 August 1942 to suppress the Quit India Movement.
- Modeled on these lines, four ordinance-
 - the Bengal Disturbed Areas (Special Powers of Armed Forces) Ordinance
 - the Assam Disturbed Areas (Special Powers of Armed Forces) Ordinance

- the East Bengal Disturbed Areas (Special Powers of Armed Forces) Ordinance
- the United provinces Disturbed Areas (Special Powers of Armed Forces) Ordinance
- These ordinances were invoked by the central government to deal with the internal security situation in the country in 1947 which emerged due to the Partition of India.

ASI declared 6 monuments of national importance in 2018

- Recently six monuments declared protected and of national importance by the Archaeological Survey of India (ASI) in 2018.

These monuments are:

1. The 125-year-old Old High Court Building in Nagpur, Maharashtra
2. Two Mughal-era monuments in Agra — Haveli of Agha Khan and Hathi Khana.
3. The ancient Neemrana Baori in Rajasthan's Alwar district
4. The Group of Temples at RanipurJharail in Odisha's Bolangir district
5. The Vishnu Temple in Kotali, Pithoragarh district, Uttarakhand.

Related Information

- In 2016 and 2017, no new monument was included in the list of sites of national importance.
- The last monument to be included in the list, in 2015, was the Vishnu Temple in Nadavayal in Kerala's Wayanad district.

Note: A "Monument of National Importance" is designated by the Archaeological Survey of India and includes the following.

1. The remains of an ancient monument.
2. The site of an ancient monument.
3. The land on which there are fences or protective covering structures for preserving the monument.
4. Land by means of which people can freely access the monument.

Makaravilakku festival begins in Sabarimala

Related Information

- The festival includes the Thiruvabharanam (sacred ornaments of Ayyappan) procession and a congregation at the hill shrine of Sabarimala.
- Makaravilakku is a part of a religious ritual that is practiced in the past by the tribes in the forest of Ponnambalamedu (the place where Makaravilakku appears) and then later secretly continued by The Travancore Devaswom Board (TDB).
- It has been practiced for more than hundreds of years by the tribes.

Sabarimala

- Sabarimala is a temple complex located at the Periyar Tiger Reserve in the state of Kerala, India.
- The temple is dedicated to the Hindu deity Ayyappan also known as Dharma Sastha, who according to belief is the son of Shiva and feminine incarnation of Vishnu.
- The traditions of Sabarimala are a confluence of Shaivism, Shaktism, Vaishnavism, and other Śramaṇa traditions.

Sabarimala Case Verdict

- In response to a PIL filed in 1991, the Kerala High Court had observed the restriction of entry of women (in the 10-50 age groups) to the temple was in accordance with the usage prevalent from time immemorial.
- In lieu of this, it had directed the Devaswom Board to uphold the customary traditions of the temple.
- However, on 28th September 2018, the Supreme Court of India overturned the ban on the entry of women, declaring that the selective ban on women was unconstitutional and discriminatory.

Center launches a sanitary pad-making initiative

- Recently Ministry of Petroleum launched the Ujjwala Sanitary Napkins initiative.
- This initiative launched with the help of three oil marketing companies – IOCL, BPCL, and HPCL

Related Information

- This mission is a part of the CSR initiative of OMCs in Odisha.

- It is aimed to educate women on female hygiene and health, improve accessibility to low cost eco-friendly sanitary pads and boost rural employment and economy.
- The Ujjwala pads will be made of virgin wood pulp sheet, non-woven white sheet and a gel sheet which are all biodegradable in nature and will leave a minimal carbon footprint.

Ross Island is now Netaji Dweep

- Recently Prime Minister announced the renaming of three islands of the Andaman and Nicobar archipelago as a tribute to Netaji Subhas Chandra Bose.
- The Ross Island was renamed Netaji Subhas Chandra Bose Dweep, Neil Island as Shaheed Dweep and the Havelock Island as Swaraj Dweep.

Related Information

Andaman and Nicobar Islands

- The Andaman and Nicobar Islands, one of the seven union territories of India, are a group of islands at the juncture of the Bay of Bengal and the Andaman Sea.
- The territory is about 150 km (93 mi) north of Aceh in Indonesia and separated from Thailand and Myanmar by the Andaman Sea.
- It comprises two island groups, the Andaman Islands (partly) and the Nicobar Islands, separated by the 150 km wide Ten Degree Channel (on the 10°N parallel),
- The Andaman Sea lies to the east and the Bay of Bengal to the west.
- The islands host the Andaman and Nicobar Command, the only tri-service geographical command of the Indian Armed Forces.
- The Andaman Islands are home to the Sentinelese people, an uncontacted people.
- The Sentinelese are the only people currently known to not have reached further than a Paleolithic level of technology.

ISRO launches 'Samwad with Students'

- As part of the enhanced outreach programme of ISRO, a platform

named "Samwad with Students" has been launched.

- The Samwad with Students aims to constantly engage youngsters across India to capture their scientific temperament.
- The new conversation mission will inspire students cutting across schools and colleges.
- The first SwS event saw 40 wards and 10 teachers from selected schools.

Related Information

Indian Space Research Organisation (ISRO)

- Its headquartered in the city of Bengaluru.
- Its vision is to "harness space technology for national development while pursuing space science research and planetary exploration."
- It is managed by the Department of Space, which reports to the Prime Minister of India.
- Its Motto is - Space technology in the service of humankind

Export Promotion Council Cell Established for MSME Sector

- Ministry of Micro, Small and Medium Enterprises (MSME) has established an Export Promotion Cell.
- It will:
 - (i) create a sustainable ecosystem for entire MSME development.
 - (ii) Evaluate readiness of MSMEs to export their products and services.
 - (iii) Recognize areas where improvements are required in order to be able to export effectively and efficiently
 - (iv) Integration of MSME into the global value chain.

Composition

- It will be chaired by Secretary, M/o MSME and Co-chaired by Development Commissioner, M/o MSME.
- The council will comprise of senior officials and members from M/o MSME, Commerce, MSME Export Promotion Councils, Export Development Authorities, Commodity Boards, and other bodies.

Objectives

- Target of USD 100 billion of exports from India by 2020.
- Evaluate readiness of MSMEs to export their products and services.
- Recognize areas where improvements are required in order to be able to export effectively and efficiently.
- Integration of MSMEs into Global Value Chain.

NASA's New Horizons spacecraft became the first explorer to fly past the "Ultima Thule"

- NASA's New Horizons spacecraft became the first explorer to fly past the mysterious object called "**Ultima Thule**" which is located some 4 billion miles from Earth.

Related Information

Ultima Thule

- Ultima Thule is located in the Kuiper belt in the outermost regions of the Solar System, beyond the orbit of Neptune.
- Ultima Thule means 'beyond Thule', beyond the borders of the known world, symbolizing the exploration of the distant Kuiper Belt and Kuiper Belt objects.
- It is the farthest and quite possibly the oldest, a cosmic body ever photographed by humankind.
- It measures approximately 30 km in diameter and is irregularly shaped.

New Horizons

- It was launched in 2006 and has been traveling through space for the past nine years.
- New Horizon's core science mission is to map the surfaces of Pluto and Charon, to study Pluto's atmosphere and to take temperature readings.

SIDEAD35: Gene that helps tomato fight viral infection, heat stress

- Scientists at New Delhi-based National Institute of Plant Genome Research (NIPGR) have deciphered the critical role of a single gene—SIDEAD35—in tomato plant whose expression controls its response to both heat stress and viral infection.
- Developing systems for tolerance or resistance against combined stresses is important for future crop production.

Related Information

- It has been known that RNA helicases, one of the largest gene families that function in almost all aspects of RNA metabolism, play a role in growth, development and stress response of a species.
- They are present in most of the organisms ranging from bacteria to humans, as well as plants.
- However, its role in the tomato plant's response to environmental stresses was not known.
- Now team observed that two genes (*SIDEAD23* and *SIDEAD35*) help plants withstand biotic and abiotic stresses.

Pakistan Cabinet approves the issuance of panda Bond in Chinese Currency

- The government of Pakistan has decided to launch Panda Bonds to raise loans from Chinese capital markets.
- It will help Pakistan's to move towards giving the Chinese currency, a status at par with that enjoyed by the US dollar.
- The Panda Bonds are part of its multipronged approach for bridging the foreign financing needs and building foreign exchange reserves.
- Panda Bonds will help Pakistan to diversify the investor base of capital market issuance and provide a source of raising renminbi.
- China is Pakistan's largest trading partner.
- The raising of capital in Chinese currency will aid Pakistan to bridge the deficit.

Related Information

Panda Bonds

- These bonds are Chinese renminbi-denominated bonds from a non-Chinese issuer, sold in the People's Republic of China.
- The Philippines issued its inaugural Panda bonds in 2018. It was the first ASEAN member to issue Panda bonds.

Government to achieve 100% household electrification ahead of Republic Day

- Ministry of Power said that India is likely to achieve 100 percent household electrification before 2019 Republic Day.

Recent Scenario

- India has already provided electricity access to 2.39 crore out of the targeted 2.49 crore households under the Pradhan Mantri Sahaj Bijli Har Ghar Yojana, Saubhagya scheme.
- Status of Electrification India has achieved the hundred percent electrification of the households in 25 states by December 2018.
- About 10.48 lakh households are left to be electrified in 4 states of Assam, Rajasthan, Meghalaya, and Chhattisgarh.

Related Information

SAUBHAGYA or 'Power for all' scheme

- Prime Minister launched 'Power for all' scheme to mark the birth anniversary of Pandit Deendayal Upadhyaya on September 25, 2017.
- The scheme is named as '**Saubhagya**' and provide subsidy on equipment like transformers, meters, and wires.
- The scheme also promises on-the-spot registration of applicants.
- Rural Electrification Corporation Limited (REC) is the nodal agency for coordinating the implementation of the scheme.
- The prospective beneficiary households for free electricity connections under the scheme identify using Socio-Economic and Caste Census (SECC), 2011 data.

Robust GDP growth to continue CII

- According to the Confederation of Indian Industry, India will continue to be the fastest-growing major economy, with robust GDP growth expected to continue through 2019.
- The Confederation of Indian Industry gave this statement based on strong drivers from the services sector, infrastructure activity, and better demand conditions.

The factor which contributes in sustain the robust GDP growth in the range of 7.5% in 2019.

- "Better demand conditions

- Settled GST implementation
- Capacity expansion resulting from growing investments in infrastructure
- Continuing the positive effects of the reform policies are undertaken and improved credit offtake especially in the services sector at 24%

CII has identified seven key drivers of growth that need to be encouraged in 2019

- Lowering the number of GST rate slabs
- Bolstering the insolvency
- Bankruptcy framework
- Simplifying business procedures
- Improving agricultural productivity, among others.

Cinereous vulture

- Recently, Cinereous Vulture is spotted in Hazaribagh, Jharkhand.

Related Information

- The cinereous vulture is a large raptorial bird that is distributed through much of Eurasia.
- It is also known as the black vulture, monk vulture, or Eurasian black vulture.
- It is one of the two largest Old-World vultures.

New Panel to protect Assam's Heritage

- The Union Cabinet decided to set up a high-level committee to recommend how to provide constitutional, legislative and administrative safeguards to the indigenous people of Assam, including by reserving seats in the state assembly.
- The decision has been taken according to the Assam Accord signed in 1985 which envisaged that appropriate constitutional, legislative and administrative safeguards shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people.
- The panel will also assess the requirement of measures to be taken to protect Assamese and other indigenous languages of the state, quantum of reservation in employment under the government of

Assam and other measures to protect Assamese heritage.

- The composition and terms of reference of the committee will be issued separately by the ministry of home affairs.

Related Information

- The Cabinet also approved a number of measures to fulfill the outstanding issues related to the Bodo community.
- The Bodo Accord was signed in 2003 which resulted in the establishment of a Bodoland Territorial.
- The Cabinet approved the establishment of a Bodo Museum-cum-language and cultural study center, modernization of existing All India Radio station and Doordarshan Kendra.

Exotic trees eating up Western Ghat's grasslands

- In the latest studies, it has been found that the country lost almost one-fourth of high-altitude grasslands of the Western Ghats over four decades.
- The exotic invasive trees are primarily responsible to it.

Related Information

- Earlier, the satellite images revealed that 60% of the shola-grassland landscape has changed; almost 40% (516 km²) of native high-elevation grasslands have disappeared.
- Most of this loss occurred on the mountain tops of the Nilgiri, Palani and Annamalai hill ranges, which comprise more than half of the Ghat's shola-grassland ecosystems.
- It's primarily due to the expansion of exotic trees (pine, acacia, and eucalyptus).
- Later in 2018, scientists decided to study how shola-grasslands across the Ghats – from the Baba Budan Hills in Karnataka to Tamil Nadu's Ashambu Hills – changed in extent between 1972 and 2017.
- Broadly, shola-grassland ecosystems in Tamil Nadu showed the highest rates of invasion.
- The immediate reaction should be taken to remove all exotics including mature plantations from grasslands.

Agri Export Zones

- The concept of Agri Export Zone (AEZ) was introduced in 2001, through EXIM Policy 1997-2001.
- It takes a comprehensive look at a particular produce/product located in a contiguous area for the purpose of developing and sourcing the raw materials, their processing/packaging, leading to final exports.
- The concept hinged primarily on:
(a) the convergence of existing Central and State Government schemes to take care of financial interventions required at various stages of the value chain;
(b) the partnership among various stakeholders viz. Central Government, State Government, farmer, processor, exporter etc.; and
(c) focus on targeted products and areas to identify required policy interventions.
- All these activities did take place in certain respects in the notified Agri Export Zones.
- In December 2004, an internal peer review conducted by the Department of Commerce concluded that the notified AEZs had not been able to achieve the intended objectives.
- It was decided that there will be no creation of new AEZs unless there were strong and compelling reasons.
- No new AEZs have been set up after 2004.
- All the notified AEZs have completed their intended span of 5 years and have been discontinued.

RBI launches SRPHi

- The Reserve Bank of India (RBI) has launched Survey on **Retail Payment Habits of Individuals (SRPHi)**.
- The Survey will capture payment habits of individuals in cities of Delhi, Mumbai, Kolkata, Chennai, Bengaluru and Guwahati.

Related Information

- Sigma Research & Consulting Pvt Ltd has been engaged by RBI to conduct the fieldwork of the survey.
- Around 6000 individuals from various socio-economic backgrounds across

six cities would be covered under the survey.

- The survey seeks qualitative responses from individuals on their payment habits.
- The findings of the survey will provide insights into awareness and usage habits of digital payment products.

Kerala women form 'wall' to uphold gender equality against Sabarimala protests

- Numbers of women from across Kerala formed a 620-km long Women's Wall, that stretched from Kasargod in northern Kerala to the southernmost district of Thiruvananthapuram, to uphold gender equality and renaissance values.
- This was a state-sponsored move done in the backdrop of protests in Sabarimala due to Supreme Court's decision to all women to pray at the Ayyappa shrine.

Krishak Bodhu Scheme

- West Bengal government announced Krishak Bondhu Scheme for the welfare of Farmer.
- Under this scheme, if a farmer aged between 18 to 60 years dies a natural or unnatural death, the state government will pay his family Rs 2 lakh.

Related Information

- Other initiative was taken by West Bengal Government in which farmers would get Rs 2,500 twice a year for growing a single crop on one acre of land.
- The West Bengal government has already waived tax and cess on agricultural land to help farmers in distress.
- Recently, the Odisha government also approved financial aid to farmers through 'Krushak Assistance for Livelihood and Income Augmentation' (KALIA) scheme.

B V R Mohan Reddy committee on Technical Education submitted a report to AICTE

- A government committee on Technical Education submitted its

report to All India Council for Technical Education (AICTE) which is headed by BVR Mohan Reddy.

Recommendation of the Committee

- The committee has advised the AICTE not to permit the establishment of new colleges from 2020.
- It has recommended AICTE to review the creation of new capacity every two years.
- It recommends that institutes should be encouraged to convert current capacity in traditional disciplines to emerging new technologies.
- The committee has urged the AICTE to introduce undergraduate engineering programmes exclusively for following disciplines.
 1. Artificial intelligence
 2. Blockchain
 3. Robotics
 4. Quantum computing
 5. Data sciences

AICTE

- It is a national level Apex Advisory Body to conduct a survey on the facilities available for technical education.
- It has been given a statutory status by an Act of Parliament in 1987.
- It promotes the development of technical education in India in a coordinated and integrated manner.
- It grants approval for starting new technical institutions, for the introduction of new courses and for variation in intake capacity in technical institutions.
- It is headquartered in New Delhi.

Madhya Pradesh to get 'spiritual department'

- The Madhya Pradesh Government is going to create an Adhyatmik Vibhag (spiritual department) by merging several existing departments.
- The proposed Adhyatmik Vibhag (Spiritual Department) going to be formed by merging Dharmik Nyas Evam Dharmasv Department (Religious Trust and Endowment Department), Anand Vibhag (Happiness Department) in addition to the Directorate of Religious Trust

and Endowment, Madhya Pradesh Teerth Evam Mela Pradhikaran and Rajya Anand Sansthan.

- The 'Anand Vibhag' (Department of Happiness) set up by the government, a first in the country would be incorporated into this new department.

India records 377 mine deaths in three years (2015-2017)

- Coal mines have accounted for the highest number of casualties due to accidents in mines. Of the 377, more than half, 210, were killed in coal mines.
- These figures were provided by the Labour and Employment Ministry.
- Jharkhand, which recorded 69 deaths in the three years, has accounted for the highest death of coal mine workers in accidents inside mines.
- Goda in Jharkhand witnessed one of the biggest open cast mine accidents in 2016 when 23 workers died in December that year.

Govt launches "Green-Ag", GEF-assisted project

- The Government of India launched a GEF assisted project, namely Green-Ag: Transforming Indian agriculture for global environment benefits and the conservation of critical biodiversity and forest landscapes in collaboration with the Food and Agriculture Organization (FAO).
- It was launched in high-conservation-value landscapes of five states, namely Madhya Pradesh (Chambal landscape), Mizoram (Dampa landscape), Odisha (Similipal landscape), Rajasthan (Desert National Park landscape) and Uttarakhand (Corbett-Rajaji landscape) in September 2018.
- The project seeks to mainstream biodiversity, climate change, and sustainable land management objectives and practices into Indian agriculture.
- The overall objective of the project is to catalyze the transformative change of India's agricultural sector to support the achievement of national

and global environmental benefits and conservation of critical biodiversity and forest landscapes.

How this project benefit for India?

- The project will support harmonization between India's agricultural and environmental sector priorities and investments so that the achievement of national and global environmental benefits can be fully realized without compromising India's ability to strengthen rural livelihoods and meet its food and nutrition security.

Related Information

Global Environment Facility (GEF)

- It was established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems.
- The GEF unites 183 countries in partnership with international institutions, civil society organizations (CSOs), and the private sector to address global environmental issues while supporting national sustainable development initiatives.

The GEF also serves as a financial mechanism for the following conventions:

- CBD Convention on Biological Diversity.
- United Nations Framework Convention on Climate Change (UNFCCC)
- UN Convention to Combat Desertification (UNCCD)
- Stockholm Convention on Persistent Organic Pollutants (POPs)
- Minamata Convention on Mercury

Centre to introduce Commercial Space Activities Bill in Budget session

Features of the Space Activities Bill, 2017

- The Space Activities Bill, 2017 is aimed at regulating space activities to ensure peaceful exploration and use of outer space.
- The important features of the bill are:
(i) The bill provides for a non-transferable license to be provided by the Central Government to any person carrying out commercial space activity.

(ii) The bill empowers the Central Government to formulate the appropriate mechanism for licensing, eligibility criteria, and fees for the license.

(iii) The Central Government would be required to maintain a register of all space objects (any object launched or intended to be launched around the earth) and develop space activity plans for the country.

(iv) The Central Government would ensure safety requirements and supervise the conduct of every space activity of India and investigate any incident or accident in connection with the operation of space activity.

(v) The bill provides for penal provisions if any person undertakes any commercial space activity without authorization they shall be punished with imprisonment up to 3 years or need more than Rs 1 crore or both.

(vi) The bill requires licensed entities to carry out operations in a manner that prevents the contamination of outer space or damage to the earth's environment.

Problems with the Bill

- The Bill does not address space-based activities separately.
- The definition puts every space object under its ambit, meaning even hardware that carries GPS receivers could require a license.
- The Bill could also affect navigation services provided by companies such as Google Maps, Ola and Uber.

Assam Accord: Fine line between 'Indian citizen' and 'Assamese'

- The Union Cabinet cleared a proposal to set up a high-level committee to look into the implementation of Clause 6 of the Assam Accord of 1985.

Why is Clause 6 significant, especially in the context of the NRC and the Citizenship (Amendment) Bill, 2016?

What is Clause 6?

- It is a part of the Assam Accord that came at the culmination of a movement against immigration from Bangladesh.

- According to Clause 6 - "Constitutional, legislative and administrative safeguards, as may be appropriate, shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people".
- For recognition as citizens, the Accord sets March 24, 1971, as the cutoff.

Who are the "indigenous people" as described by Mahanta, or "Assamese people" as mentioned in Clause 6?

- Most stakeholders agree that the NRC of 1951 should be taken as the cutoff for defining "Assamese people" eligible for the proposed safeguards.
- The committee included three AASU members including Bhattacharya and then president Sarbananda Sonowal, now Assam Chief Minister.
- The 1951 NRC as the basis for defining "Assamese people" was also recommended in a report prepared by former Assembly Speaker Pranab Gogoi following consultation with 53 organizations representing various communities.

Would that not be different from the cutoff for the ongoing NRC update?

- The update is based on March 24, 1971, which defines citizenship. Clause 6 relates to "Assamese people".
- Should 1951 be accepted as the cutoff, it would imply that those who migrated between 1951 and 1971 would be Indian citizens, but would not be eligible for safeguards meant for "Assamese people".

What are these safeguards?

- The proposed committee would seek to define Mahanta views "safeguards" as reservation of electoral seats, and land and political rights.
- It also includes rights over natural resources and protection of culture of the indigenous people.

What will the proposed committee do?

- The committee would examine the effectiveness of actions since 1985 to implement Clause 6.
- It would hold discussions with all stakeholders and assess the quantum of reservation of seats in the

Assembly and local bodies for Assamese people.

- It will also assess the steps required to protect Assamese and other indigenous languages of Assam, reservation in state government jobs, and other measures.

Parliament approves proclamation of Presidents' rule in J&K

- The Parliament approved the proclamation of President's rule in Jammu and Kashmir, with the Rajya Sabha giving its nod.

President Rule

- In India, President's rule is the suspension of state government and imposition of direct Central Government rule in a state.
- Under Article 356 of the Constitution of India, in the event that a state government is unable to function according to constitutional provisions, the Central government can take direct control of the state machinery.
- Subsequently, executive authority is exercised through the centrally appointed governor, who has the authority to appoint other administrators to assist them.

Case of Jammu and Kashmir

- In the state of Jammu and Kashmir, failure of governmental function results in Governor's rule, imposed by invoking Section 92 of the Constitution of Jammu and Kashmir.
- The state's governor issues the proclamation, after obtaining the consent of the President of India.
- If it is not possible to revoke Governor's rule within six months of imposition, the President's Rule under Article 356 of the Indian Constitution is imposed.

Note: In the 1994 Bommai case, the Supreme Court of India has restricted arbitrary impositions of President's rule.

A paper sensor that can detect freshness of milk

- Scientists at IIT, Guwahati, have developed a simple paper kit that can test the freshness of milk and tell how well it has been pasteurized.

- Aided with a smartphone app, the kit can help ensure that milk is consumed before it turns too sour.

How does this sensor work?

- A milk enzyme, Alkaline Phosphatase is considered an indicator of milk quality because its presence even after pasteurization indicates the presence of microbes that may not have been rendered inactive with pasteurization.
- Researchers used ordinary filter paper to prepare the detector.
- The filter paper was cut into small discs and impregnated with chemical probes that preferentially react with ALP.
- The 'probes' used are antibodies that specifically bind to ALP. When ALP comes into contact with the probe, it turns white paper disc into a coloured one.
- The colour change on paper discs is then photographed by a smartphone camera and images processed to obtain corresponding colour values.
- These values are then compared with standard data stored in the phone.
- Thus not only the presence of ALP could be detected but the amount of it in milk could also be measured.

Some Organisations Banned Under UAPA

- In exercise of the powers vested in the Central Government under Section 3 of the Unlawful Activities (Prevention) Act, 1967 (UAPA), the Government, on being satisfied that the organizations have become Unlawful, has declared the following Organizations as Unlawful Associations during the last three years:
 - (i) Islamic Research Foundation (IRF)
 - (ii) National Liberation Front in Tripura (NLFT)
 - (iii) Tripura Tiger Forum (ATTF)
- In exercise of powers vested in the Central Government under Section 35 of UAPA, the Government on being satisfied that the organization is involved in terrorism, has added the following organizations to the First

Schedule of UAPA during the last three years:

- (i) Al-Qaida in Indian Sub-continent (AQIS) and all its manifestations
- (ii) Islamic State in Khorasan Province (ISKP)/ ISIS Wilayat Khorasan/ Islamic State of Iraq and the Sham-Khorasan (ISIS-K) and all its manifestations
- (ii) Khalistan Liberation Force and all its manifestations

First LNG import terminal of IOC commissioned in Tamil Nadu

- Indian Oil Corp (IOC), the nation's biggest oil firm, announced commission of its first Liquefied Natural Gas (LNG) import terminal in Ennore, Tamil Nadu.
- This is the first LNG import terminal IOC has built on its own and will become operational by the end of January 2019.
- IOC holds 95 percent stake in the Ennore LNG import terminal and Tamil Nadu Industrial Development Corporation (TIDCO) has 5 percent.
- The firm is also working on laying natural gas pipeline originating from the Ennore terminal to Nagapattinam in Tamil Nadu via Puducherry.
- Branch pipelines will be laid in Madurai, Tuticorin, and Bengaluru to meet the LNG demand.

All the 640 districts of the country covered under Beti Bachao Beti Padhao (BBBP) scheme

Beti Bachao Beti Padhao (BBBP)

- Launched by the PM on January 22, 2015 at Panipat, Haryana.
- Objective- Improve Child Sex Ratio, Protection, and education of girl child.
- Three ministries are involved which are -Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development.
- Initially, it was focussed on 100 districts with low Child Sex Ratio.
- The key elements of the scheme include nation-wide awareness and advocacy campaign and multisectoral action.
- Multi-sectoral action includes effective enforcement of Pre-Conception & Pre-

Natal Diagnostic Techniques (PC&PNDT) Act, Pre-Natal/ Post Natal care of the mother, improve enrolment of girls in schools, community engagement/ training/ awareness generation etc.

Asia Reassurance Initiative Act (ARIA)

- U.S. President Trump signed into law the Asia Reassurance Initiative Act (ARIA).
- The act "establishes a multifaceted U.S. strategy to increase U.S. security, economic interests, and values in the Indo-Pacific region.
- Specifically, the ARIA will authorize \$1.5 billion in spending for a range of U.S. programs in East and Southeast Asia and "develop a long-term strategic vision and a comprehensive, multifaceted, and principled United States policy for the Indo-Pacific region, and for other purposes."
- ARIA draws attention to U.S. relations with China, India, the ten-member states of the Association of Southeast Asian Nations (ASEAN), and Northeast Asian allies Japan and South Korea.
- Additionally, the act addresses U.S. policy toward North Korea.
- The law calls for the president to "develop a diplomatic strategy that includes working with United States allies and partners to conduct joint maritime training and freedom of navigation operations in the Indo-Pacific region, including the East China Sea and the South China Sea, in support of a rules-based international system benefiting all countries."

Panj Tirath: An Ancient Hindu Religious Site

- The provincial government of Khyber Pakhtunkhwa in Pakistan has declared the ancient Hindu religious site of Panj Tirath in Peshawar as national heritage.
- The site's name has its origins in the five pools of water that are part of the property, which also has a temple.

Related Information

- It is believed that mythical king Pandu from the epic Mahabharata bathed in the pools during the month of Kartik

and worshipped under the date palm trees in the area for two days.

- The site was allegedly damaged during the Afghan Durrani dynasty era in 1747 and was restored by local Hindus during the Sikh era in 1834.
- The Khyber Pakhtunkhwa government announced a fine of 2 million Pakistani rupees and five years' imprisonment for anyone found guilty of damaging the historic site.

India-Myanmar-Thailand Trilateral Highway: Boost To Act East

- Central government allocated fund for the India-Myanmar-Thailand Trilateral Highway.
- The 1360 km long India-Myanmar-Thailand Trilateral Highway is an initiative pertaining to India, Myanmar, and Thailand.
- India is undertaking construction of two sections of the Trilateral Highway in Myanmar namely.
 - (i) construction of 120.74 km Kalewa-Yagyi road section
 - (ii) construction of 69 bridges along with the approach road on the 149.70 km Tamu-Kyigone-Kalewa (TKK) road section.
- The above mentioned both the projects are being funded by the Government of India under grant assistance to the Government of Myanmar.

Related Information

- The highway is constructed with the help of NHA (It is a first international project of NHA).
- The project aims to provide seamless vehicular movement for enhancing trade, business, health, education and tourism between Indian, Myanmar and Thailand.
- It is being funded by the Ministry of External Affairs, India.

India-Myanmar-Thailand (IMT) highway

- The IMT Trilateral Highway is a regional highway being constructed under India's Act East policy to boost connectivity in the region.
- It will connect Moreh in India with Mae Sot, Thailand via Myanmar.
- The highway is expected to boost trade and commerce in ASEAN-India

Free Trade Area, as well as with the rest of Southeast Asia.

National Highways Authority of India (NHA)

- It was established through the NHA Act, 1988.
- In February 1995, it was formally made an autonomous body.
- It is a nodal agency of the Ministry of Road Transport and Highways.
- It is responsible for the development, management, operation and maintenance of National Highways

Andhra unveils second largest rock art trove

- Andhra Pradesh's second largest Petroglyph site, containing about 80 petroglyphs, has been discovered at Mekala Benchi in Kurnool district.
- These petroglyphs, or rock carvings, underscore Kurnool's importance as a major site of Neolithic settlements in south India.

Related Information

- Kandamathi, with 200 petroglyphs, is also in Kurnool district.
- While Mekala Benchi has petroglyphs dating back from the Neolithic to the Megalithic period, Kandamathi carvings range from the prehistoric to the historic period.

Petroglyph

- Petroglyphs are images created by removing part of a rock surface by incising, picking, carving, or abrading, as a form of rock art.
- The term petroglyph should not be confused with petrograph, which is an image drawn or painted on a rock face.

Scientists unearth Asia's first fossil Dioscorea yam leaf

- A quaint fossilised leaf is one of the most recent finds throwing light on India's past.
- The leaf fossil is the first of Dioscorea yams from Asia and hints at a Gondwanan origin to these plants.
- These fossils are found when the Scientist dig in the Eocene-era (38-56 million years ago) Gurha lignite mine in Bikaner in western Rajasthan, they obtained two well-preserved fossils of large leaves.

Related Information

- The team named their new find "Dioscorea eocenica": the first ever Dioscorea fossil recorded from Asia.
- Currently, species of Dioscorea in India are found in the humid, tropical forests of the country.
- Other fossil plants observed in the mine also suggest this historical climate in the area, which is now dry and consists of desert vegetation.

Masked dance tradition rises from near extinction

- Cambodia's centuries-old tradition of masked dance was nearly wiped out by the Khmer Rouge's "Killing Fields" regime.
- Lakhon Khol, nearly wiped out by the Khmer Rouge regime.
- Recently Lakhon Khol of Cambodia and Khon from Thailand listed by UNESCO as an intangible cultural heritage.

Related Information

- The all featuring dancers wearing elaborate painted masks depicting the Ramayana.
- In Cambodia, the art form is still struggling to recover from the Khmer Rouge, under whose genocidal 1975-79 rule at least 1.7 million people, including artists, dancers and writers, died, mostly from starvation, overwork, disease, execution or torture.

MPs' panel proposes legal status for SSC

- A Parliamentary Standing Committee (PSC) headed by Bhupender Yadav has recommended that the Centre accord statutory status to the Staff Selection Commission (SSC).
- SSC is one of the largest recruitment agencies in the country.

Why this status ?

- The Union Public Service Commission (UPSC) and all State Public Service Commissions either have constitutional or legal status. The SSC is the only such organisation that performs similar functions on a much larger scale, but does not enjoy statutory status.

Staff Selection Commission

- It is an organization under Government of India to recruit staff for various posts in the various Ministries and Departments of the Government of India and in Subordinate Offices.
- The commission is an attached office of the Department of Personnel and Training (DoPT) which consists of Chairman, two Members and a Secretary-cum-Controller of Examinations.
- Every year SSC conducts the SSC Combined Graduate Level Examination for recruiting non-gazetted officers to various government jobs.

Swachh Sundar Shauchalaya

- The Ministry of Drinking Water and Sanitation has launched a month-long campaign, "Swachh Sundar Shauchalaya" that commenced on 1st January.
- It is an effort to promote ownership and sustained usage of toilets and also provide a facelift to the crores of toilets built under the Swachh Bharat Mission.
- The campaign comprises a unique Contest, under which, households are being mobilised to paint and decorate their toilets.
- It will be spearheaded by Gram Panchayats and coordinated by district administrations.
- The campaign will involve rural communities in Gram Panchayats across the country.
- Individual households, Gram Panchayats, and Districts will be awarded on the basis of a number of toilets painted and the quality and creativity of their work.

Related Information

- The sanitation coverage in rural India has already crossed 98%, with over 9 crore toilets built under Swachh Bharat Mission (Grameen) since its launch.
- Access to toilets is an important step towards the adoption of safe sanitation practices and an Open Defecation Free (ODF) nation.

About Swachh Bharat Mission

- Swachh Bharat Mission (SBM) is a nation-wide campaign in India for the period 2014 to 2019.
- The mission has two thrusts: Swachh Bharat Abhiyan ("gramin" or 'rural'), which operates under the Ministry of Drinking Water and Sanitation; and Swachh Bharat Abhiyan ('urban'), which operates under the Ministry of Housing and Urban Affairs.
- Its aims to clean up the streets, roads and infrastructure of India's cities, towns, and rural areas.
- The objectives of Swachh Bharat include eliminating open defecation through the construction of household-owned and community-owned toilets and establishing an accountable mechanism of monitoring toilet use.
- Its mission aims to achieve an "open-defecation free" (ODF) India by 2 October 2019, the 150th anniversary of the birth of Mahatma Gandhi.

Note: The mission will also contribute to India reaching Sustainable Development Goal 6 (SDG 6), established by the UN in 2015

Menstrual Hygiene Schemes

- Health Ministry addressed the need for menstrual hygiene among adolescent girls residing primarily in rural areas under the Menstrual Hygiene Scheme.
- The funds are provided to States/UTs through National Health Mission for decentralized procurement of sanitary napkins packs.

This scheme encompasses the following:

- Increasing awareness among adolescent girls on Menstrual Hygiene
- Improving access to and use of high quality sanitary napkins by adolescent girls in rural areas.
- Ensuring safe disposal of Sanitary Napkins in an environmentally friendly manner.
- Provision of funds to ASHAs to hold a monthly meeting with adolescents to discuss issues related to menstrual hygiene.

Note: ASHAs across the country are trained and play a significant role in the promotion of use and distribution of the sanitary napkins.

Smartphone interred in 'Techno' time Capsule

- A Time Capsule with items representing today's technology and India's scientific prowess was buried by Nobel Laureates Avram Hershko from Israel and F.Duncan M. Haldane from the USA on the occasion of the on-going 106th Indian Science Congress at Lovely Professional University, Jalandhar.
- The Time Capsule contains 100 items that represent modern-day technology as experienced in India which was buried at a depth of 10 feet and will remain buried for the next 100 years

Related Information

Indian Science Congress Association

- Indian Science Congress Association (ISCA) is a premier scientific organization of India.
- Its headquarters at Kolkata, West Bengal.
- The Association was formed with the following objectives:
 - (i) To advance and promote the cause of science in India.
 - (ii) To hold an annual congress at a suitable place in India.
 - (iii) To publish such proceedings, journals, transactions and other publications as may be considered desirable.
 - (iii) To secure and manage funds and endowments for the promotion of Science including the rights of disposing of or selling all or any portion of the properties of the Association.

Rajya Sabha passes a Bill to scrap No-Detention Policy for Children

- The Bill, which was passed by the Lok Sabha in July 2018, seeks to amend the Right to Education Act, 2009 to abolish the no-detention policy in schools.
- The earlier Right of Children to free and Compulsory Education Bill prohibited schools to detain students till they complete elementary education even on account of under-performance.

- The aim was to decrease the drop-out rates in school and to reduce the emphasis on year-end examinations.
- This was replaced with continuous evaluation of students' progress throughout the year.

Provision of the bill

- States now have the power to decide to continue with the no-detention policy.
- States can choose to conduct an examination either at the end of classes 5 and 8, or both.
- Students who are unable to clear the examinations will receive additional instructions and the opportunity to appear for a re-examination within two months of the declaration of the result.
- If the students still do not manage to clear the exam, the state may decide to detain them.
- No child shall be expelled from a school till the completion of elementary Education.

No- Detention Policy

- As per the No-Detention Policy under the Right to Education Act, no student can be failed or expelled from school till the completion of elementary education covering classes 1 to 8.
- All the students up till Class 8 will automatically be promoted to the next class.
- The essence of the policy is that children should not be 'failed' and detained up to Class 8.

Mission Shakti Scheme

- Odisha Chief minister announced interest-free loan up to Rs 3 lakh for the women self-help group members (SHGs), a move that would benefit around 70 lakh women associated with six lakh groups.
- Mission Shakti is an initiative started in 2001 aiming at economic empowerment of women by forming SHGs and providing them with loans through banks at a low-interest rate to take up various livelihood activities.
- It encouraged entrepreneurship through SHGs and is now empowering them digitally to grow and prosper.

Andhra Pradesh unveils schemes for marginalized Brahmins

- Andhra Pradesh unveiled various welfare scheme for the marginalized and economically backward Brahmins through AP Brahmin Welfare Corporation.
- Andhra Pradesh is the first state of the country which has established a Brahmin Corporation.
- The aims Brahmin Corporation to help poor people of Brahmin families by providing financial assistance for education, coaching, entrepreneurship, skill development, and welfare and culture.
- The scheme includes such as a distribution of Cars to the Unemployed Brahmin youths, loans, and subsidies.

Regulation of Functions of MSMEs

- Ministry of Micro, Small and Medium Enterprises has introduced a various initiative to promote the Ease of Doing Business and also including the online filing of Udyog Aadhaar Memorandum (UAM).
- The Ministry has also taken the following steps:

MSME SAMADHAAN Portal- for empowering micro and small entrepreneurs across the country to directly register their cases relating to delayed payments.

MSME SAMBANDH Portal- to help in monitoring the implementation of public procurement policy for micro and small enterprises.

MSME SAMPARK Portal – A digital platform wherein jobseekers (passed out trainees/students of MSME Technology Centres) and recruiters get connected.

Digital Payments- to pass on the benefits of the schemes of Ministry of MSME through the digital payment gateway.

Related Information

- For regulating the functions of the MSMEs, the Government has enacted the Micro, Small and Medium Enterprise Development (MSMED) Act, which is applicable to all the States and Union Territories.

FASTag

- A MoU for sale of FASTags through petrol pumps of leading Oil Marketing Companies was signed between Indian Highways Management Company Limited - IMHCL and leading Oil Marketing Companies (OMCs) like BPCL, HPCL, and IOCL.
- This will help expand the FASTag program's distribution network which is presently active at selected bank branches.
- This is a bank-neutral FASTag which can be linked to customers' choice of bank accounts.
- This not only provides flexibility and convenience to the FASTag users but is also user-friendly as there will be no requirement of fulfilling KYC obligations.
- Two FASTag mobile apps were also launched.

The My FASTag Customer App has the distinction of real-time recharge of any FASTag through UPI, it links IMHCL FASTag with customer's bank account and there is no need to install multiple banks applications.

In the FASTag Point of Sales App - it is possible to create and manage distribution partners, as also to allow sales via petrol pumps.

Related Information

FASTag

- FASTag is an electronic toll collection system in India, operated by the National Highway Authority of India (NHAI).
- It employs Radio Frequency Identification (RFID) technology for making toll payments directly from the prepaid or savings account linked to it.
- It is affixed on the windscreen of the vehicle and enables to drive through toll plazas without stopping for transactions.
- The tag can be purchased from official Tag issuers or participating Banks

Note:- National Electronic Toll Collection - NETC programme, it is proposed to include all state/city toll plazas under one umbrella.

Heritage and Culture of Particularly Vulnerable Tribes Groups

- The Ministry of Tribal Affairs is implementing a scheme namely "Development of Particularly Vulnerable Tribes Groups (PVTG)" for the welfare of PVTGs.
- The scheme is flexible as it enables the States/Union Territory(UT) to focus on areas that they consider is relevant to PVTGs and their socio-cultural environment while retaining the culture and heritage of the community by adopting habitat development approach and intervening in all spheres of their social and economic life.
- Housing, land distribution, land development, agricultural development, animal husbandry, construction of link roads, culture, installation of non-conventional sources of energy for lighting purpose, social security or any other innovative activity meant for the comprehensive socio-economic development of PVTGs.

PVTG

- 75 tribal groups have been categorized by Ministry of Home Affairs as Particularly Vulnerable Tribal Groups (PVTG)s.
- PVTGs reside in 18 States and UT of A&N Islands.

Cabinet approves 10% reservation for the economically weaker section in general category

- Central government approved percent reservation for economically weaker people among the general category in government jobs and educational institutions.
- The approved quota is intended for all those communities/classes that do not come under 50 per cent quota.
- It will be for all communities - for the economically backwards among Hindus, Muslims, Christians etc.
- This will not affect the reservation for SCs, STs and OBCs.

Eligibility criteria for reservation:

- To be eligible for general category reservation, the person can at max possess:
 - (i) Annual income below 8 lakh
 - (ii) Agriculture land below 5 acre

- (iii) Residential house below 1000 sq ft.
- (iv) Residential plot below 100 yards in the notified municipality
- (v) Residential plot below 200 yards in non notified municipality area

Related Information

- To implement the decision, the government will require to push for a Constitutional amendment to increase the limit of quota from a maximum of 50 per cent to 60 per cent.
- Articles 15 and 16 of the Constitution will have to be amended for implementation of the decision.
- Articles 15, 16 falls under the category of Fundamental Rights in the Part III of the Indian Constitution.
- **Article 15** states that the State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them. Also, nothing in this article shall prevent the state from making any special provisions for women, children or any socially and educationally backward classes.
- **Article 16** guarantees the Equality of opportunity in matters of public employment with no discrimination being done on basis of religion, race, caste, sex, place of birth.

HRD introduces 70-point grading index to assess the quality of school education in states

- The Ministry of Human Resource Development has introduced a 70-point grading index to assess the quality of school education offered by states.
- In this grading system, the states will be marked out of 1,000 scores on 70 parameters.
- It will help to get the correct picture of where every state stands. There will be a fair competition to improve each other's performances.

Related Information

Ministry of Human Resource Development

- The Ministry of Human Resource Development, formerly the Ministry of Education is responsible for the development of human resources in India.
- The Ministry is divided into two departments:
 - (i) The Department of School

Education and Literacy, which deals with primary, secondary and higher secondary education, adult education and literacy, and

- (ii) The Department of Higher Education, which deals with a university education, technical education, scholarship etc.

Rail Kumbh Seva' mobile app

- North Central Railway launched a **Rail Kumbh Seva Mobile App** that will help those arriving in Allahabad for the Kumbh Mela starting from January 15 to navigate through the city and the mela grounds.
- The 'Rail Kumbh Seva Mobile App' will also provide information regarding all the 'Mela special' trains that will be run during the period.
- Through this app, the user will not only get to know their current location but will also be able to reach to all railway stations, the mela zone, major hotels, bus stations, and other facilities within Allahabad city.
- It will also provide information about passenger amenities available at the stations -- parking lots, refreshment rooms, waiting rooms, book stall, food plaza, ATMs and train inquiry.

Fugitive Offender

- A special court in Mumbai declared absconding liquor baron Vijay Mallya a fugitive economic offender (FEO).
- Mallya has become the first businessman to be declared FEO under the provisions of the new Fugitive Economic Offenders Act which came into existence in August 2018.

The Fugitive Economic Offender Bill 2018

- The Bill allows for a person to be declared as a fugitive economic offender (FEO) if:
 - (i) an arrest warrant has been issued against him for any specified offences where the value involved is over Rs 100 crore, and
 - (ii) he has left the country and refuses to return to face prosecution.
- To declare a person an FEO, an application will be filed in a Special Court (designated under the Prevention of Money-Laundering Act, 2002) containing details of the properties to be confiscated, and any information about the person's whereabouts.

- The Special Court will require the person to appear at a specified place at least six weeks from the issue of notice.
- Proceedings will be terminated if the person appears.
The Bill allows authorities to provisionally attach properties of an accused, while the application is pending before the Special Court.
- Upon declaration as an FEO, properties of a person may be confiscated and vested in the central government, free of encumbrances (rights and claims in the property).
- Further, the FEO or any company associated with him may be barred from filing or defending civil claims.

Cyclone Pabuk

- The India Meteorological Department (IMD) has issued an Orange alert for the Andaman Islands as cyclonic storm Pabuk is moving north-northwestwards.
- It is originated over the Gulf of Thailand and neighbourhood.

Related Information

- The cyclone warnings are issued to state government officials in four stages.
- **The First Stage warning known as "PRE-CYCLONE WATCH"** issued 72 hours in advance contains an early warning about the development of a cyclonic disturbance in the north Indian Ocean, its likely intensification into a tropical cyclone and the coastal belt likely to experience adverse weather.
- **The Second Stage warning known as "CYCLONE ALERT"** is issued at least 48 hrs.
- **The Third Stage warning known as "CYCLONE WARNING"** issued at least 24 hours in advance of the expected commencement of adverse weather over the coastal areas.
- **The Fourth Stage of warning known as "POST LANDFALL OUTLOOK"** is issued at least 12 hours in advance of the expected time of landfall.

Different color codes used at the different stages of the cyclone warning bulletins

- Cyclone Alert- Yellow
- Cyclone Warning-Orange

- Post-landfall outlook- Red

The DNA Technology (Use and Application) Regulation Bill - 2019

- The Lok Sabha passed "The DNA Technology (Use and Application) Regulation Bill - 2019".
- The Bill has been formulated recognizing the need for regulation of the use and application of Deoxyribonucleic Acid (DNA) technology, for establishing an identity of missing persons, victims, offenders, under trials and unknown deceased persons.
- The purpose of this Bill is to expand the application of DNA-based forensic technologies to support and strengthen the justice delivery system of the country.

The key components of this Bill include:

- establishment of a DNA Regulatory Board
- accreditation of DNA laboratories undertaking DNA testing, analyzing, etc.;
- Establishment of the National and Regional DNA Data Banks, as envisaged in the Bill, will assist in forensic investigations.

Related Information

DNA Profiling (DNA fingerprinting, DNA testing, or DNA typing)

- DNA profiling is the process where a specific DNA pattern, called a profile, is obtained from a person or a sample of bodily tissue.
- Even though we are all unique, most of our DNA is actually identical to other people's DNA.
- However, specific regions vary highly among people. These regions are called polymorphic.
- Differences in these variable regions between people are known as polymorphisms.
- Each of us inherits a unique combination of polymorphisms from our parents.
- DNA polymorphisms can be analyzed to give a DNA profile.

Short tandem repeats method for DNA Profiling

- One of the current techniques for DNA profiling uses polymorphisms called short tandem repeats.
- Short tandem repeats (or STRs) are regions of non-coding DNA that contain repeats of the same nucleotide sequence.
- For example, GATAGATAGATAGATAGATA is an STR where the nucleotide sequence GATA is repeated six times.
- STRs are found at different places or genetic loci in a person's DNA.
- To produce a DNA profile, scientists examine STRs at ten, or more, genetic loci. These genetic loci are usually on different chromosomes.

Application of DNA Profiling

- Identify the probable origin of a body fluid sample associated with a crime or crime scene
- Reveal family relationships
- Identify disaster victims

IIT Madras team produces gas hydrates under 'space' conditions

- Researchers at Indian IIT Madras have experimentally shown that methane and carbon dioxide (CO₂) can exist as gas hydrates at temperatures and pressures seen in the interstellar atmosphere.
- Gas hydrates are formed when a gas such as methane gets trapped in well-defined cages of water molecules forming crystalline solids.
- In terrestrial conditions, gas hydrates are formed naturally under the sea bed and glaciers under high pressure, low-temperature conditions.
- Methane hydrate is a potential source of natural gas.
- IIT Madras, in collaboration with GAIL, is working to recover methane from methane hydrate from the Krishna-Godavari Basin and sequester CO₂ simultaneously.

Applications in Sequester of CO₂

- The carbon dioxide hydrate produced in the lab raises the possibility of sequestering or storing carbon dioxide as hydrates by taking advantage of ice

existing in environmental conditions favorable for hydrate formation.

- CO₂ hydrate is thermodynamically more stable than methane hydrate. So if methane hydrate has remained stable for millions of years under the sea bed, it would be possible to sequester gaseous CO₂ as solid hydrate under the sea bed.

Related Information

Carbon sequestration

- It is a process involved in carbon capture and the long-term storage of atmospheric carbon dioxide or other forms of carbon to mitigate or defer global warming.

Government plans to rename Indian Forest Service

- The Centre has proposed another pro-tribal measure – renaming of the Indian Forest Service as **Indian Forest and Tribal Service**.
- The Department of Personnel and Training (DoPT) has initiated an inter-ministerial consultation note to rename the service and also train its cadre to be more receptive towards tribals and forest dwellers.

Related Information

- The recommendations to change the name of Indian Forest Service were made by the National Commission for Scheduled Tribes (NCST) in its annual report.

The NCST had made the following observations in this regard:

- The NCST highlights the close ties between tribals, the forest and forest ecosystem as a resource base.
- NCST recommends the renaming of the Indian Forest Service into Indian Forest and Tribal Service in recognition of the close ties between tribals, the forest and forest ecosystem.
- NCST argues that merging forest and tribal welfare administrations will further the participation of 'tribals' in forest management.
- The NCST states that renaming will also engender greater sensitivity on the forest department's part towards the needs of 'tribal' communities.

Indian Forest Service

- Indian Forest Service (IFoS) is one of the three All India Services of the Government of India.
- The other two All India Services being the Indian Administrative Service (IAS) and the Indian Police Service (IPS).
- It was constituted in the year 1966 under the All India Services Act, 1951 by the Government of India.
- The British Government had constituted the Imperial Forest Service in 1867.
- The main mandate of the service is the implementation of the National Forest Policy in order to ensure the ecological stability of the country through the protection and participatory sustainable management of natural resources.
- The highest ranking IFS official in each state is the Head of Forest Forces (HoFF).
- Ministry of Environment, Forest and Climate Change, (MoEFCC) under the Government of India, is the Cadre Controlling Authority of the Indian Forest Service.

HD 21749b- New Planet

- The National Aeronautics and Space Administration (NASA) of USA have discovered a new planet.
- It is the third new planet discovered by the NASA mission, Transiting Exoplanet Survey Satellite (TESS).

Salient features of the newly discovered planet

- The new planet HD 21749b is outside our solar system and orbits a dwarf star 53 light years away.
- HD 21749b orbits a bright star in the constellation Reticulum. It has the longest orbital period of all the three discoveries made by TESS.
- HD 21749b orbits its star in a relatively leisurely 36 days.
- It is predicted that the surface of the new planet is likely around 300 degrees Fahrenheit, which is relatively cool, given its proximity to its star, which is almost as bright as the sun.

Related Information

Other planet discovered by TESS: Pi Mensae b and LHS 3844b.

TEES Mission

- TESS is a NASA Astrophysics Explorer mission.
- The objective of the mission is to discover planets smaller than Neptune that transit stars bright enough to enable follow-up spectroscopic observations that can provide planet masses and atmospheric compositions.

National programme for organic production

- The Ministry of Industries and Commerce had initiated the National Programme for Organic Production to assist the organic producers to tap the market which is growing steadily in the both in domestic and export segments.

Related Information

National Programme for Organic Production (NPOP)

- The Ministry of Industries and Commerce is implementing the NPOP since 2001.
- The Objectives of the Program are
 - To provide the means of evaluation of certification programme for organic agriculture and products as per the approved criteria.
 - To facilitate the certification of organic products in conformity with the prescribed standards.
 - To facilitate certification of organic products in conformity with the importing countries organic standards as per equivalence agreement between the two countries or as per importing country requirements.
 - To encourage the development of organic farming and organic processing.

Note: APEDA is the implementation agency for the NPOP.

Agricultural & Processed Food Products Export Development Authority (APEDA)

- It is an export promotion organization under Ministry of Commerce & Industries, Government of India.

- It was established by the GOI under the APEDA Act passed by the Parliament in December 1985.
- APEDA replaced the Processed Food Export Promotion Council (PFEPCC).
- It is mandated with the responsibility of promotion and development of the export of its scheduled products.

Animals begin to arrive at Wayanad Sanctuary

- The seasonal migration of wild animals from wildlife sanctuaries in Karnataka and Tamil Nadu to the Wayanad Wildlife Sanctuary (WWS) has begun with the rise in temperature in the Nilgiri Biosphere.
- Mammals such as elephants and gaurs migrate to the sanctuary from the adjacent Bandipur and Nagarhole national parks in Karnataka and the Mudumalai national park in Tamil Nadu are arriving in WWS.

Related Information

Wayanad Wildlife Sanctuary

- Wayanad Wildlife Sanctuary is an animal sanctuary in Wayanad, Kerala, India.
- Established in 1973, the sanctuary is now an integral part of the Nilgiri Biosphere Reserve.
- It is bounded by protected area network of Nagarhole and Bandipur of Karnataka in the northeast, and on the southeast by Mudumalai of Tamil Nadu.

Note: Wayanad district has the largest population of Adivasi in Kerala.

Uttar Pradesh Government faces heat from allies on OBC report

- The sub-categorization of OBC quota in Uttar Pradesh makes allies of allies turning on the heat over the issue amid a clash of interests.
- The Social Justice Committee report suggests the panel has recommended a split of the 27% OBC quota into three categories.
- The panel headed by retired Allahabad High Court judge Raghavendra Kumar has listed 79 sub-castes under the OBC category.

- Of these, nine falls under Backward Class, 37 under More Backward and 33 under Most Backward categories.
- Listed under the Backward Class — those who will be restricted to 7% quota — are castes like Yadav, Kurmi and Jat.
- The panel says that these castes are social, economically and culturally “strong” and have been recruited in government jobs more than the ratio of their population, while also enjoying political representation.

Sub-categorisation of Other Backward Class

- The Supreme Court in its order in **Indra Sawhney and others vs. Union of India** observed that there is no constitutional or legal bar to State categorizing backward classes as backward or more backward and had further observed that if a State chooses to do it (sub-categorization), it is not impermissible in law.
- At present, there is a single Central OBC list, with entries from each State. People belonging to all of these categories can seek reservation from within the single 27% OBC reservation pie for Central government jobs and Central educational institutions.
- At present nine States, however, have already sub-categorized OBCs.
- These are Andhra Pradesh, Telangana, Puducherry, Karnataka, Haryana, Jharkhand, West Bengal, Bihar, Maharashtra and Tamil Nadu.

Central government gives nod for Centre for Classical Language in Kerala

- The Union Government issued its nod for setting up the Centre for Classical Language at the Thunchath Ezhuthachan Malayalam University in Tirur.
- Its aim to study and research and other aspects of Malayalam language which will prove beneficial in implementing various projects for Malayalam language development.
- It was in August 2013 Malayalam was declared a classical language.

Related Information

Official Language

- According to Article 343, the official language of India should be Hindi in Devanagari script.
- As per Eight schedules of the Indian constitution, we have 22 Official languages.

Classical Language

- In 2004 it was decided by the Indian Government to proclaim Indian Languages meeting certain requirements as "Classical Language".
- Languages so far declared to be Classical are Tamil, Sanskrit, Kannada, Telugu, Malayalam, and Odia.

Criteria to determine the eligibility of languages to be considered for classification as a "Classical Language":

- High antiquity of its early texts/recorded history over a period of 1500–2000 years.
- A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers.
- The literary tradition should be original and not borrowed from another speech community.
- The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots.

NCDC model for cooperatives as Modern banking

- Ministry of Agriculture launched the National Cooperative Development Corporation (NCDC's) model for cooperatives as Modern banking Unit during the 2nd Governing Council meeting of National Council for Cooperative Training (NCCT).

Related Information

NCCT

- It is being responsible for training, awareness and evaluation programmes of employees working in the cooperative sector.
- The main objective of the NCCT is to facilitate the human resource development in the cooperatives in the country.

NCDC

- It aims to strengthen cooperative banks at various levels and bring about financial inclusion of farmers in the remote villages of the country.
- The model includes upgradation and new setup of IT and related infrastructure such as Data Centre, Enterprise Network and Security, Core Banking Solutions (CBS), ATMs, POS, e-Lobby, etc.
- It also includes assistance to cooperatives in capacity development through its dedicated Laxmanrao Inamdar National Academy for Co-operative Research & Development.
- The objective behind the Primary Agricultural Credit Co-operative Societies (PACS) computerization project is to provide a robust IT platform leading to automation of all activities of the PACS.
- For this, NCDC has taken a comprehensive step for strengthening of cooperative as Modern Banking Units.

124th Constitution Amendment Bill

- Lok Sabha passed the Constitution (124th Amendment) Bill 2019 to provide 10 percent reservation in jobs and educational institutions to economically backward section in the general category.
- The Bill amends Article 15 of the Constitution, by adding a clause which allows states to make "special provision for the advancement of any economically weaker sections of citizens".
- These "special provisions" would relate to "their admission to educational institutions, including private educational institutions, whether aided or unaided by the state, other than the minority educational institutions".

Related Information

CONSTITUTION AMENDMENT BILLS (Article 368)

- Bills seeking to amend the Constitution are of three types:—
(1) Bills that are passed by Parliament

by a simple majority;
(2) Bills that have to be passed by Parliament by the special majority prescribed in article 368(2) of the Constitution; and
(3) Bills that have to be passed by Parliament by the special majority as aforesaid and also to be ratified by not less than one-half of the State Legislatures.

- Bills seeking to amend all other provisions of the Constitution including those enumerated in the proviso to article 368(2) are called by the title 'Constitution Amendment Bills'.
- These Bills can be introduced in either House of Parliament.
- If sponsored by a Private Member Motions for the introduction of the Bills are decided by simple majority.
- In case of any disagreement between the two Houses of Parliament on a Constitution Amendment Bill, there cannot be a joint sitting of the Houses of Parliament on the Bill as article 368 of the Constitution requires each House to pass the Bill by the prescribed special majority.

Special Majority

- Constitution Amendment Bills have to be passed in each House of Parliament by a special majority i.e. by a majority of the total membership of that House and by a majority of not less than two-thirds of the members of the House "present and voting".
- The expression "total membership" means the total number of members comprising the House irrespective of whether there are vacancies or absentees on any account.

First Swadesh Darshan project in Meghalaya inaugurated

- Meghalaya inaugurated the project "Development of North East Circuit: Umiam (Lake View) - U Lum Sohpetbneng- Mawdiangdiang - Orchid Lake Resort" implemented under Swadesh Darshan Scheme of Ministry of Tourism, Government of India.

- The project was sanctioned by the Ministry of Tourism in July 2016.
- Under this project, the Ministry has developed facilities like Traditional Healing Centre, Tribal Rejuvenation Centre, Tourist Information Centre, Multipurpose Hall, Log Huts, Cafeteria, Sound and Light show, Souvenir Shops, Solid Waste Management etc.

Related Information

Swadesh Darshan Scheme

- It was launched by Union Tourism Ministry with objective to develop theme-based tourist circuits in the country.
- These tourist circuits will be developed on principles of high tourist value, competitiveness and sustainability in an integrated manner.
- It is 100% centrally funded scheme for project components undertaken for public funding.
- It also has provision for leveraging voluntary funding under Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and corporate sector.
- The funding of projects under this scheme varies from state to state.
- It is finalised on basis of detailed project reports prepared by Programme Management Consultant (PMC) which is national level consultant for implementing the scheme.

"Web- Wonder Women" Campaign

- The Ministry of Women and Child Development, Government of India, has launched an online campaign, '#www : Web- WonderWomen'.
- The Campaign aims to discover and celebrate the exceptional achievements of women, who have been driving positive agenda of social change via social media.
- This Campaign will recognize and acknowledge the efforts of these meritorious Women.
- It is a campaign to specially honor and encourage such voices that have in their own capacity driven a positive impact on social media platforms.

Related Information

- The Campaign invites Entries via Nominations from across the world, as per the laid out criteria.
- Indian-origin women, working or settled anywhere in the world, are eligible for nomination.

Galápagos island gets its first iguanas since Darwin after mass-release

- A group of more than 1,400 iguanas has been reintroduced to an island in the Galápagos archipelago nearly two centuries after they disappeared from there.
- This initiative is a part of an ecological restoration programme.
- The last recorded sighting of iguanas in Santiago Island had been made by British naturalist Charles Darwin in 1835.
- Land iguana is an herbivore that helps ecosystems by dispersing seeds and maintaining open spaces devoid of vegetation.
- IUCN status: Vulnerable

Related Information

Galápagos Islands

- The Galápagos Islands, part of the Republic of Ecuador, are an archipelago of volcanic islands distributed on either side of the equator in the Pacific Ocean.
- The Galapagos archipelago contains unique wildlife and vegetation and is a UNESCO World Heritage site and one of the most fragile ecosystems in the world.

Nandan Nilekani to head five-member RBI panel on digital payments

- The Reserve Bank of India has appointed a five-member panel headed by Nandan Nilekani to suggest ways to improve digital payments.
- The panel would assess the current levels of digital payments in financial inclusion.
- The panels also suggest measures to strengthen the safety and security of digital payments.
- It provides a road map for increasing customer confidence to use digital transactions, and suggest a medium-term strategy for deepening of digital payments.

- The committee will submit its report in 90 days from its first meeting.

Related Information

Digital Payment?

- Digital payment is a way of payment which is made through digital modes.
- In digital payments, payer and payee both use digital modes to send and receive money.
- It is also called electronic payment.

Jal Charcha

- Union Minister for Water Resources, River Development and Ganga Rejuvenation released the inaugural issue of the monthly magazine of the Ministry – Jal Charcha – in New Delhi.
- The 25-page inaugural issue of Jal Charcha is the start of a journey that aims to engage with the people of India in informed decision-making at the central level.
- The magazine is also an effort to bring the best practices in the water sector to the national stage and move ahead in the direction of creating water consciousness in the minds of the people of the country

Why some snakes are deadlier than others?

- Scientists have uncovered why the venom of some snakes makes them so much deadlier than others.
- The study tackled this puzzle by comparing records of venom potency and quantity for over 100 venomous snake species, ranging from rattlesnakes, cobras and the tree-dwelling boomslangs of Africa to sea snakes and burrowing asps.

Evolutionary standpoint

- The Scientist found strong evidence that venoms have evolved to be more potent against animals that are closely related to the species that the snake commonly ate.
- These results make sense from an evolutionary viewpoint as we expect that evolution will have shaped venoms to be more efficient at killing the prey.
- The research showed that the amount of venom a snake has depends on both its size and the environment it lives in.

Dosage-dependent

- The big terrestrial species have the most venom, while smaller tree-dwelling or aquatic species had the least.

What is the Concern?

- Snakebites are a major health concern worldwide, with 2.7 million cases each year.
- Understanding how venom evolves may help us better identify the risks to humans from different snake groups, and also potentially from other venomous animals such as spiders, scorpions, centipedes, and jellyfish.

Related Information

Venom

- A poisonous substance secreted by animals such as snakes, spiders, and scorpions and typically injected into prey or aggressors by biting or stinging.

India to become world's third largest consumer market by 2030: WEF

- World Economic Forum in its latest report said that India is set to become the world's third largest consumer market behind only USA and China by 2030.
- The report said consumer spending in India is expected to grow from 1.5 trillion US dollar at present to six trillion US dollar by 2030.
- India is currently the world's sixth largest economy.
- The report titled 'Future of Consumption in Fast-Growth Consumer Market - India' also noted that growth of the middle class will lift nearly 25 million households out of poverty.

Persian Gulf Regional Dialogue Forum

- Iran proposed the Persian Gulf Dialogue forum at Raisina Dialogue conference held in New Delhi.
- It aims to address the lingering conflicts and mistrust in the Gulf region.
- In the backdrop of the continued erosion of the Gulf Cooperation Council (GCC), it can bring peace and prosperity in the region.

- The proposed forum includes:
 - Admission to such a forum should be based on accepting generally-recognized principles and shared objectives.
 - The forum should render international boundaries inviolable and use of force impermissible.
 - Agenda of the forum should be to connect people of various member countries cutting across all traditional boundaries.
 - The member countries will have to follow a set of confidence-building measures.
 - These measures could include freedom of navigation, assurance of free flow of energy and protection of the fragile marine ecology of the Gulf.

Related information

GULF COOPERATION COUNCIL (GCC)

- GCC is a regional intergovernmental political and economic union consisting of all Arab states of the Persian Gulf except Iraq.
- Its member states are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.
- The Charter of the GCC was signed on 25 May 1981.

RAISINA DIALOGUE:

- The Raisina Dialogue is a multilateral conference held annually in New Delhi.
- It started in the year 2016.
- It has emerged as India's flagship conference on geopolitics and geo-economics.
- The conference is hosted by the Observer Research Foundation, an independent think tank, in collaboration with the Ministry of External Affairs of India.

Research Advisory Committee

- Market regulator Security and Exchange Board of India (SEBI) has constituted a 'Research Advisory committee'.
- It will assist in formulating policy to undertake research relevant for the development and regulation of capital markets.

- It will strengthen its research function and enhance its linkage to policymaking.
- It will comprise of prominent financial economists and market practitioners.
- It will be headed by **Sankar De.**
- In addition, it will maintain databases relevant for capital market regulation research also.

Related information

SEBI

- It is a statutory body under SEBI Act, 1992.
- It regulates the securities and capital market in India.
- It was established in 1988.

Gangajal project

- The Prime minister has launched the Gangajal project worth Rs 2,980 crores in Agra city.
- It aims to provide better and more assured water supply.
- He also laid the foundation stone for an Integrated Command and Control Centre for the Agra Smart City project.
- It will give a push to develop and enhance Tourism infrastructure in Agra.
- It will benefit both the residents and the tourists.

India's Health Crisis

- According to the latest National Health Profile (NHP) 2018, India is among the countries with the least public health spending.
- The government intends to invest only 2.5 percent of the country's GDP into health care by 2025, while the global average is about 6 percent.
- Even lower-income countries like Bhutan, Sri Lanka and Nepal spend 2.5 percent, 1.6 percent and 1.1 percent of the GDP respectively on their people's health.
- Households spent four times less in government hospitals (7.5%) than private hospitals.
- WHO's health financing profile for 2017 shows 67.78% of total expenditure on health in India was paid out of pocket.
- The world average out of pocket expenditure is just 18.2%.

- State-wise distribution of health expenditure:
 - Mizoram's per capita health expenditure is Rs 5,862 (4.2% of state GDP), almost five times the Indian average.
 - Arunachal Pradesh (Rs 5,177) and Sikkim (Rs 5,126) followed at the top.
 - At the other end of the spectrum, Bihar spent Rs 491 per capita on health -less than half the Indian average- spending 1.33 percent of its GDP on health.
 - Just above Bihar were Madhya Pradesh (Rs 716) and Uttar Pradesh (Rs 733).
 - While Delhi spends Rs 1,992 per capita on health

Related Information:

National Health Profile (NHP)

- The National Health Profile covers demographic, socio-economic, health status and health finance indicators, along with comprehensive information on health infrastructure and human resources in health.
- CBHI has been publishing National Health Profile every year since 2005.

Central Bureau of Health Intelligence (CBHI)

- It was established in 1961 by the Act of Parliament on the recommendation of the Mudaliar committee.
- It is the Health Intelligence Wing under Directorate General of Health Services, Ministry of Health & Family Welfare (MoHFW).
- Its mission is to strengthen Health Information System (HIS) in each of the districts in the country.

National Clean Air Programme

- Union Environment Minister Harsh Vardhan launched the National Clean Air Programme (NCAP).
- It is collaborative and participatory in nature, **not legally binding on states.**
- The scheme is termed as "war against pollution" across the length and breadth of the country.
- It has set a 'tentative' national level target of 20-30 percent reduction in PM2.5 and PM10 concentration within the next five years.

- 2017 is kept as the base year for the comparison of concentration.
- The target will be effective in **102 polluted cities** across the country.
- It will also use the Smart Cities programme to launch the NCAP in 43 Smart cities in the list of 102 non-attainment cities.
- It has provision for 'mid-term policy review' also.

Related information

PM2.5 and PM10:

- 5 and PM10 refer to atmospheric particulate matter (PM) that have a diameter of less than or equal to 2.5 and 10 micrometers respectively.
- Particulates are microscopic solid or liquid matter suspended in the atmosphere of Earth.

Universal Basic Income

- Sikkim's ruling party, the Sikkim Democratic Front (SDF), has decided to include UBI in its manifesto ahead of the Assembly elections.
- It aims to implement the scheme by 2022.
- It has already started the process to introduce the unconditional direct cash transfers.
- So, Sikkim is set to become the first state in India to roll out Universal Basic Income (UBI).

Related information:

Universal Basic Income (UBI):

- UBI is a regular and periodic cash payment delivered unconditionally to all citizens without the requirement of work or willingness to work.
- The main idea behind UBI is to prevent or reduce poverty and increase equality among citizens.
- The essential principle is the idea that all citizens are entitled to a livable income, irrespective of the circumstances they're born in.

Some facts about SIKKIM

- World's first fully organic state.
- Sikkim received the UN Future Policy Gold Award in 2018 for paving the way for the rest of the world.
- Sikkim became the 22nd State of the Indian Union after Constitution (36th Amendment) Act, 1975.

Tokenisation of card transactions

- Reserve of India (RBI) has allowed all card payment networks to offer tokenization service.
- However, no charges should be recovered from the customer for availing this service.
- Tokenization of debit, credit and prepaid card transactions is allowed.
- It aims to enhance the safety of the digital payments ecosystem in the country.

Related information:

TOKENISATION:

- Tokenization involves a process in which a unique token masks sensitive card details.
- The token is then used to perform card transactions in contact-less mode at Point Of Sale (POS) terminals, Quick Response (QR) code payments, etc.
- Thus, tokenization will replace card details with a code, called a "token".

Pranav R Mehta became first Indian to Head Global Solar Council

- Pranav R Mehta has taken over as the president of Global Solar Council (GSC) from January 1, 2019.
- Today, India is placed amongst the Top 5 solar players in the world and is a third largest solar market.

Global Solar Council (GSC)

- The Global Solar Council (GSC) was launched on December 6, 2015, following the historic United Nations Climate Change Conference (UN COP 21).
- The GSC came into being as International Coalition of more than 30 nations, utilizing maximum solar energy, decided to harness the renewable energy for the greater good.
- The GSC has its headquarters in Washington D.C., USA.

'One Family, One Job' scheme

- Sikkim CM launched the 'One Family One Job' scheme, under which for every family one government job has been allotted, in Gangtok.
- The Scheme was launched during "Rojgar Mela" at the Paljor Stadium in Gangtok.

- Sikkim became the first state in the country to carry out such a programme for the people entitling them to state government employee benefits.

Related Information

Proud Mother scheme

- Sikkim Govt has implemented a Proud Mother scheme to increase the decreasing fertility in the State.
- Govt grants incentive to women delivering 1st & 2nd live Children.
- The concerned Proud Mothers scheme will cover original Sikkimese including Lepcha, Bhutia, and Nepali.

Renukaji Multipurpose Dam Project

- The Union Minister for Water Resources, Shipping, and Road Transport & Highways signed a MoU with the Uttar Pradesh, Rajasthan, Uttarakhand, Haryana and Himachal Pradesh for the construction of Renukaji Multi-Purpose Dam project in the Upper Yamuna Basin.

Related Information

Renukaji Dam Project

- Three storage projects are proposed to be constructed on the river Yamuna and two of its tributaries - Tons and Giri in the hilly regions of Uttarakhand and Himachal Pradesh.
- These include
 - (i) Lakhwar project on river Yamuna in Uttarakhand,
 - (ii) Kishau on river Tons in Uttarakhand and Himachal Pradesh and
 - (iii) Renukaji on river Giri in Himachal Pradesh.
- These three projects were identified as National Projects in 2008 under which 90% funding of the cost of irrigation & drinking water component will be provided by the Govt of India as central assistance and the rest 10% cost of the irrigation and drinking water component will be borne by the beneficiary states.
- The project is proposed to be executed by Himachal Pradesh Power Corporation Ltd. (HPPCL).
- The project envisages construction of 148 M high rock-filled dam for the

supply of 23 cumec water to Delhi and other basin states.

Impact of Dam

- After the construction of the dam, the flow of river Giri will increase by about 110% which will meet the drinking water needs of Delhi & other basin states up to some extent in a lean period.
- Stored water of Renukaji Dam will be used by UP, Haryana & NCT of Delhi from Hathnikund Barrage, by NCT of Delhi from Wazirabad Barrage and by UP, Haryana, and Rajasthan from Okhla Barrage.

Citizenship Bill issue: Muted Bhogali Bihu fete in Assam

- A contentious Bill to legitimize the stay of non-Muslim migrants from India's neighborhood has made many in Assam decide to break an age-old tradition — by fasting during an agrarian festival of feasting.

Related Information

Bhogali Bihu

- Magh Bihu (also called Bhogali Bihu) is a harvest festival celebrated in Assam.
- It is the Assam celebration of Makar Sankranti, with feasting lasting for a week.
- Uruka is the precursor to Magh Bihu to be celebrated.
- Uruka is marked by lighting bonfires and feasting at a Meji or Bhelaghar, a temporary structure made with bamboo, hay, and dried plantain

Adultery, homosexuality not acceptable in Army

- Chief General Bipin Rawat said that Adultery and homosexuality have been not be allowed in the army in spite these are decriminalized in the country by the Supreme Court.

Related Information

Adultery Sec. 497 of IPC

- Recently the Supreme Court struck down as unconstitutional the 158-year-old Section 497 of IPC+ that punished a married man for the offense of adultery if he had sexual relations with a married woman "without the consent or connivance of her husband.

What is Adultery law in Indian?

- Section 497 of the Indian Penal Code was a section dealing with adultery.
- Under this law, a woman cannot be punished for the offense of adultery.
- Only a man who has consensual sexual intercourse with the wife of another man without his consent can be punished under this offense in India.
- If someone "lives in adultery", the partner can file for divorce.

Reasons were given by Honorable SC

- The Supreme Court called the law unconstitutional because it "treats a husband as the master."
- The Offence of adultery treats women as chattel, dents their dignity.
- The court tested Section 497 on the touchstone of constitutional provisions dealing with the right to equality and guarantees against arbitrariness and discrimination.

New Provisions

- Adultery could continue to be a ground for aggrieved spouses to seek a divorce from their adulterous partners.
- If one of the spouses committed suicide because of the adulterous nature of her/his partner, then the culprit could be proceeded against for the criminal offense of abetting.

Homosexuality: Section 377 of IPC

- This year the Supreme Court unanimously decriminalized the colonial law under Section 377 of the IPC that banned consensual unnatural sex between adults.
- After this verdict, the LGBT stands for lesbian, gay, bisexual, and transgender community enjoys the same rights as other citizens under the Constitution.

States' approval not needed for quota Bill

- Recently the Constitution (One Hundred and Twenty Fourth Amendment) Bill of 2019 and 103 amendment act, 2109 providing up to 10% reservation for economically weaker sections of the society.
- Gujarat became the first state to provide 10 percent reservation in jobs

and educational institutions to the economically weaker sections in the general category.

Related Information

- The provision to Article 368 (power of Parliament to amend the Constitution and procedure thereof) holds that an amendment to a fundamental right coming under Part III of the Constitution need not be ratified by the Legislatures of one-half of the States.
- So, this Bill may be notified by the Central government as soon as it gets the assent from the President.
- Only Constitution amendments which affect the Centre-State relations or division of powers in a federal structure require subsequent ratification by the States' Legislatures before the Presidential assent.

Right to equality

- The Bill, passed by both the Houses of the Parliament, adds new clauses to Articles 15 and 16 of the Constitution.
- Both the Articles come under the part of 'Fundamental Rights' in the text of the Constitution.
- The new clause (6) to Article 15 allows the government to carve reservation for the economically weaker sections of the society in higher educational institutions, including private ones, whether they are aided or not by the State.
- Minority educational institutions are exempted.
- Likewise, the new clause (6) to Article 16 provides for quota for economically-deprived sections in the initial appointment in government services.

Note:

- The Indira Sawhney judgment has capped the reservation limit to 50%.
- Now, the new Bill increases reservation to 60%.

Cabinet approves Bilateral Swap Arrangement between India and Japan

- The Union Cabinet has approved the proposal for entering into an Agreement for Bilateral Swap Arrangement (BSA) between India and Japan and authorizing the

Reserve Bank of India (RBI) to sign the Agreement for Bilateral Swap Arrangement between the RBI and the Bank of Japan for a maximum amount of USD 75 billion.

Salient Features:

- The swap arrangement is an agreement between India and Japan to essentially exchange and re-exchange a maximum amount of USD 75 Billion for domestic currency, for the purpose of maintaining an appropriate level of balance of payments for meeting short-term deficiency in foreign exchange.

Benefits:

- The BSA is a very good example of mutual cooperation between India and Japan for the strategic objective of assisting each other in times of difficulty and for restoring international confidence.
- This facility will enable the agreed amount of Capital being available to India on tap for use. Also, with this arrangement in place, prospects of Indian companies would improve in tapping foreign capital as there would be greater confidence in the stability of the country's exchange rate.
- Availability of such swap line to tide over difficulties arising out of Balance of Payment (BOP) would deter speculative attacks on the domestic currency and greatly enhance the RBI's ability to manage exchange rate volatility.

Note: The arrangement is another milestone in mutual economic cooperation and special strategic and global partnership between India and Japan.

ISRO starts Human Space Flight center

- Gaganyaan, the great Indian human leap to space by 2022, will soon get cracking under a new Human Space Flight Centre and a dedicated team.
- ISRO named Unnikrishnan Nair, who led its Advanced Space Transportation Programme at the Vikram Sarabhai Space Centre, as the man to steer it - as also the director of the new Human Space Flight Centre.

Gaganyaan Project

- It is India's first manned space mission which carried out with the collaboration of ISRO and Russia's federal space agency ROSCOSMOS.
- Under this programme India is planning to send three humans (Gaganyatris) into space i.e. in low earth orbit (LEO) by 2022 i.e. by 75th Independence Day for period of five to seven days.
- The mission was announced by Prime Minister Narendra Modi during his 72nd Independence Day speech.
- Under this mission, the crew of three astronauts will conduct experiments on microgravity in space.
- This mission will make India fourth nation in the world after USA, Russia, and China to launch a human spaceflight mission.

Oceans are heating up at a quickening pace: Report

- Researchers said the world's oceans are heating up at an accelerating pace as global warming threatens a diverse range of marine life and a major food supply for the planet.

Role of Ocean in Climate Change

- Ocean heating is a very important indicator of climate change.
- About 93% of excess heats are trapped around the Earth by greenhouse gases that come from the burning of fossil fuels which accumulates in the world's oceans.

Highlight of report

- The latest report relied on four studies, published between 2014 and 2017, that gave more precise estimates of past trends in ocean heat, allowing scientists to update past research and hone predictions for the future.
- A key factor in the more accurate numbers is an ocean monitoring fleet called Argo, which includes nearly 4,000 floating robots that "drift" throughout the world's oceans, every few days diving to a depth of 2,000 m and measuring the ocean's temperature, pH, salinity and other bits of information as they rise back up.

- Argo “has provided consistent and widespread data on ocean heat content since the mid-2000s.
- The new analysis shows warming in the oceans is on pace with measurements of rising air temperature.

Note: The models predict that the temperature of the top 2,000 meters of the world’s oceans will rise 0.78 degrees Celsius by the end of the century.

Women of India Organic Festival

- The Ministry of Women and Child Development is organizing the three-day 6th ‘Women of India Organic Festival’ in Chandigarh.
- The festival aims to encourage Indian women entrepreneurs and farmers to connect with more buyers and thus, empower them through financial inclusion while promoting organic culture in India.
- It also aims to educate people about its various initiatives and schemes relating to women and children.

Related Information

Ministry of Women & Child Development

- The Ministry has 6 autonomous organizations working under its aegis
 - (i) National Institute of Public Cooperation and Child Development (NIPCCD)
 - (ii) National Commission for Women (NCW)
 - (iii) National Commission for Protection of Child Rights (NCPCR)
 - (iv) Central Adoption Resource Agency (CARA)
 - (v) Central Social Welfare Board (CSWB)
 - (vi) Rashtriya Mahila Kosh (RMK)

Democracy Index 2018

- Recently the Democracy Index 2018 is released annually by Economist Intelligence Unit (EIU).
- The index will provide a snapshot of the state of world democracy for 165 independent states and two territories.
- The Economist’s Democracy Index ranks nations on five parameters.
 - (i) Electoral process and pluralism
 - (ii) Functioning of government

- (iii) Political participation
- (iv) Political culture
- (v) Civil liberties

India Position and Performance

- India is ranked at 41 which is notched above last year.
- India achieved a score of 7.23 on the index to maintain its position which **is the same it did last year.**
- India ranks below the US (ranked 25th in the index) and other so-called ‘flawed democracies’ like Italy, France, Botswana, and South Africa.
- According to the index, this is the lowest ever score attributed to India in the index ever since its publication.
- **India has been always classified as a flawed democracy.**
- The report defines a flawed democracy as nations that “have free and fair elections and, even if there are problems (such as infringements on media freedom), basic civil liberties are respected.
- However, there are significant weaknesses in other aspects of democracy, including problems in governance, an underdeveloped political culture and low levels of political participation.

Devadasi custom

- Recently, studies done on the Devadasi practice by the National Law School of India University (NLSIU), Bengaluru, and the Tata Institute of Social Sciences (TISS) in Mumbai reveal that more than thirty-six years after the Karnataka Devadasis (Prohibition of Dedication) Act of 1982 was passed, the State government is yet to issue the rules for administering the law.

Highlights of the studies

- In the studies, it is found that special children, with physical or mental disabilities, are more vulnerable to be dedicated as devadasis about 19%.
- The girls from socio-economically marginalized communities continued to be victims of the custom and thereafter were forced into the commercial sex racket.
- Law in IPC: The Protection of Children from Sexual Offences (POCSO) Act

2012, and Juvenile Justice (JJ) Act of 2015 have not made any reference to it as a form of sexual exploitation of children.

Related Information

Devadasi System

- Devadasi system is a banned religious practice in some parts of India whereby parents marry a daughter to a deity or a temple.
- The marriage usually occurs before the girl reaches puberty.
- The Union Home Ministry in December 2015 had asked all states to take strong action against those involved in the heinous practice which is against the dignity of women.

Citizenship Bill: Chakma and Hajong communities in a spot

- The contentious Citizenship (Amendment) Bill, 2016 has put the spotlight on Bengali Hindus in Assam.
- The Citizenship Bill would serve as a legal basis for legitimizing the claims of Chakma and Hajong refugees as the indigenous people of Assam State.

Related Information

- The Chakmas and Hajongs are ethnic people who lived in the Chittagong Hill Tracts, most of which are located in Bangladesh.
- Chakmas are predominantly Buddhists, while Hajongs are Hindus.
- They are found in northeast India, West Bengal, Bangladesh, and Myanmar.
- The Chakmas and Hajongs living in the Chittagong Hill Tracts fled erstwhile East Pakistan in 1964-65 since they lost their land to the development of the Kaptai Dam on the Karnaphuli River.

Chennai Traffic Police introduces robot "ROADEO" for traffic management

- The Chennai Traffic Police introduced robot "ROADEO" which will help police in traffic management and assist pedestrians in Chennai roads.
- The robot will make the pedestrians, especially children, feel safe while crossing the roads.

Related Information

- It will also ease the work of traffic police, as these robots can be

integrated with the traffic signals, as well as can be operated manually, through a Bluetooth app.

- The robot has two hands to interact with the people and show traffic signs.
- It has highly expressive eyes to create a feel of a neighborhood helper and also a display to show important messages.

Commerce Ministry launched "Womaniya on GeM"

- This initiative will enable women entrepreneurs and women self-help groups [WSHGs] to sell handicrafts and handloom, accessories, etc directly to various Government ministries, departments, and institutions.
- The initiative aligns with Government's initiatives for MSMEs, especially to reserve 3 percent in government procurement from women entrepreneurs.
- This initiative will also address goals and objectives under the United Nations **Sustainable Development Goal 5: Achieve gender equality and empower all women and girls.**

Related Information

Government e-Marketplace (GeM)

- GeM is an Online Market platform to facilitate the procurement of goods and services by various Ministries and agencies of the Government.
- It has been envisaged as National Procurement Portal of India which aims to enhance transparency, efficiency, and speed in public procurement of goods and services and eliminate corruption.
- It functions under Directorate General of Supplies and Disposals (DGS&D), Ministry of Commerce and Industries.
- It is completely paperless, cashless and system driven e-marketplace that enables procurement of common use goods and services with a minimal human interface

Section 126 of the RP Act, 1951

- A Committee constituted under to review and suggest modifications and changes in the provisions of Section 126 and other sections of the RP Act

1951 and provisions of Model Code of Conduct have submitted its report.

- it was headed by the senior deputy election commissioner Umesh Sinha.

The Committee had the following scope of work:

- Internet service providers and social media companies should take down content violating the 48-hour ban on campaigning prior to polling, instantly and latest within 3 hours of EC issuing such a direction.
- Examine the type, category or growth of communication technology or media platform in the country and difficulties in regulating these media platforms during the multiphase election when prohibitory period of 48 hours is in force.
- Impact of new media platforms and social media during the prohibitory period of 48 hours before the close of poll and its implication in view of the provisions of section 126.
- Examine the present provisions of Model Code of Conduct (MCC) related to the above issues and suggest modification in this regard.

Way forward:

- The recommendations made by the Committee, when implemented, will help in minimizing the possible interference of activities which aim at indirectly influencing voters during the valuable silence period of 48 hours provided to them.
- The recommendations of the Committee will be considered by the Commission in detail for follow up action.

Trishna Gas Project

- The National Wildlife Board has given its approval for the Trishna Gas project of ONGC which falls in the Trishna Wildlife Sanctuary in the Gomati district of Tripura.
- Trishna gas project ONGC has discovered 10-12 gas bearing wells in the Trishna Wildlife sanctuary.
- The gas extracted from these wells would be supplied to the North Eastern Electric Power Corporation Ltd (NEEPCO) owned 100 MW gas-based thermal power project at Monarchak

in Sonamura subdivision of Sipahijala district of Tripura.

National Wildlife Board

- It is a statutory organization constituted under the Wildlife Protection Act, 1972.
- It is an apex body to review all wildlife-related matters and approves projects in and around national parks and sanctuaries.
- National Wildlife Board consists of :
 - It is chaired by the Prime Minister
 - Union Minister of Environment, Forest and Climate Change is the vice-chairman of the Board
 - Other members include 15 non-government members, 19 ex-officio members, 10 government officials such as secretaries.

Trishna Wildlife Sanctuary

- It is a Wildlife Sanctuary in Tripura, India.
- The vegetations in the sanctuary fall under four broad categories of tropical semi-evergreen forest, the east Himalayan lower Bhanar sal, Moist mixed deciduous forest, and the Savanah woodland.

'Ama Ghare LED' scheme

- Odisha government has launched the 'Ama Ghare LED' scheme.
- Under this scheme, about 95 lakh families in the State will each get four LED bulbs free of cost.
- Under the scheme, 9-watt LED bulbs will be distributed to the beneficiaries registered under the National Food Security Act (NFSA) and the State Food Security Scheme (SFSC).
- Odisha Power Transmission Corporation Ltd (OPTCL) will implement the scheme and the bulbs will be distributed through camps and PDS outlets across the State.
- The beneficiaries will have to produce biometric authentication to get the benefits of the scheme.

First extinction of 2019: Hawaiian tree snail

- Recently in a report, it has found that the last known *Achatinella apexfulva* has now been listed in the first extinction species of 2019.

Related Information

Achatinella apexfulva

- It is an extinct species of colorful, tropical, arboreal pulmonate land snail in the family Achatinellidae once present on Oahu, Hawaii.
- This species was endemic to forests of the island of Oahu in the Hawaiian archipelago, United States, but is now extinct in the wild.
- In April 2011, it was reported that the species had been reduced to a single, captive individual.
- A major cause of its population decline in the wild was predation by the rosy wolf snail.

Note: In January 2019, it was reported that the last member of the species, a 14-year-old snail named George, had died.

Sino-Indian Digital Collaboration Plaza

- The Sino-Indian Digital Collaboration Plaza (SIDCOP), an initiative to bring Indian IT companies and Chinese enterprises closer to each other on a single AI enabled platform was launched in 2019.
- This is a partnership by National Association of Software and Services Companies (NASSCOM) with Municipal Governments of Guiyang and Dalian.

Related Information

Sino-Indian Digital Collaboration Plaza (SIDCOP)

- The initiative aims to bring Indian IT companies and Chinese enterprises closer to each other on a single AI enabled platform.
- This platform will be managed by a joint venture comprising of one Indian and Chinese company.
- The initiative aims to encash the expertise of Indian IT enterprises in business transformation and operational optimization by using IT tools in complex business environments.

NASSCOM

- It is a not-for-profit industry association and is the apex body for the Indian IT-BPM industry.
- It aims to make sure that service quality and enforcement of

Intellectual Property Rights have been properly implemented in the Indian software and BPM industry.

DD Science and India Science:

- Union Science & Technology Ministry inaugurated two National Level initiatives launched by the Department of Science and Technology and Prasar Bharti in field of Science Communication.
- These two science communication platforms are a part national-level initiatives to elevate science into a celebration and bring it close to everyday life.
- The channels have been conceived and supported by the DST and are being implemented and managed by Vigyan Prasar, an autonomous organisation of DST.
- The two science channels which are milestones in the history of science communication in India are the first step in creating a national science channel for the country.

Related Information

DD Science

- It will be a one-hour slot on Doordarshan National channel which will telecast Monday to Saturday from 5 pm to 6 pm.

India Science

- It is an Internet-based channel, which will be available on any internet-enabled device, and will offer live, scheduled play and video-on-demand services.

Maha Agritech : An Initiative for doubling farmers' income by 2022

- Maharashtra government launched 'Maha Agritech,' a project under which area under cultivation from sowing to harvesting, climate, and diseases on crops will be monitored digitally using satellite and drone technology.
- This project is supported by Maharashtra Remote Application Centre (MRSAC) and ISRO.
- The main users of crop maps and yield forecasts are governments and agribusiness who use them to assess demand, anticipate prices and plan the use of resources.

Related Information

Other Programmes / Projects by Ministry of Agriculture and Farmers Welfare

- Forecasting Agricultural output using Space, Agrometeorology and Land based observations (FASAL)
- National Agricultural Drought Assessment and Monitoring System (NADAMS)
- KISAN (Crop Insurance using Space technology And geoinformatics)
- CHAMAN (Coordinated programme on Horticulture Assessment and Management using geoinformatics)
- Crop Intensification: Mapping and monitoring of post-Kharif rice fallow lands using Satellite Remote Sensing and GIS technologies for Rabi Crop Area Expansion.

IMBEX 2018-19

- It is the second edition of India-Myanmar bilateral army exercise.
- The objectives are:
 - (a) It provides opportunities to the army personnel of both the nations to serve effectively in UN missions by providing understanding about each other's training, tactics, procedures and best practices.
 - (b) Train the Myanmar delegation for participation in United Nations peacekeeping operations under the UN
- India is one of the largest contributors to the UN peacekeeping force and has a rich experience of serving in UN peacekeeping operations.

Philip Kotler Presidential Award

- Prime Minister of India, Narendra Modi has been awarded first-ever Philip Kotler Presidential Award by World Marketing Summit India.
- The Award focuses on the triple-bottom-line of People, Profit, and Planet.
- It will be offered annually to the leader of a Nation.
- Philip Kotler is a world-renowned Professor of Marketing at Northwestern University, Kellogg School of Management, U.S.

Desalination Plants Harm Environment: UN

- According to a U.N. backed study, desalination plants across the world produce highly salty waste-water and toxic chemicals that are damaging the environment.
- This study was part of research into how best to secure fresh water for a rising population without harming the environment.
- Desalination plants around the world are pumping out far more salt laden brine than previously believed.
- The brine raises the level of salinity and poses a major risk to ocean life and marine ecosystems.
- Brine, water comprising about 5% salt, often includes toxins such as chlorine and copper used in desalination. By contrast, global seawater is about 3.5% salt.
- More than half the brine comes from four middle eastern countries. These are Saudi Arabia, the United Arab Emirates, Kuwait and Qatar, with Saudi Arabia alone responsible for 22% of the effluent.

Related Information

Desalination

- Desalination is the process of removing salts from water to produce water that meets the quality (salinity) requirements of different human uses.
- Seawater desalination can extend water supplies beyond what is available from the hydrological cycle, providing an "unlimited", climate-independent and steady supply of high-quality water.

Note: This is in direct conflict with Sustainable Development Goal (SDG) 6, aimed at ensuring the availability of clean water for current and future generations.

Special weather services for Kumbh Mela

- Central Ministry has launched the special weather services for the benefit of people visiting Prayagraj during Kumbh Mela.
- The service will provide information of the prevailing weather and forecasts for next 3 days through four Automatic Weather stations (AWS)

and a mobile van AWS that have been installed and operationalized at different locations at Prayagraj.

- It will cover all four directions within 5-10 km radius.
- It will be helpful for the local and state authorities by providing the real-time location-specific weather information for efficient management of the entire event and also benefit the pilgrims by keeping them abreast of the latest weather information.

Odisha takes its first step towards promoting turtle tourism

- Odisha's beach witnessed its first turtle festival on January 13, 2019, where tourists, researchers, and environmentalists gathered to promote eco-tourism, which in turn could help conserve Olive Ridley turtles.
- It was organized by Cox & Kings Foundation, a philanthropic arm the travel company, in partnership with Humane Society International-India (HIS- India) and few local organizations.
- Odisha has half of the world's Olive Ridley turtle population, 90 percent of India's turtle population lives in the state.

Related Information

Olive Ridley Turtle

- The Olive ridley turtles are the smallest and most abundant of all sea turtles found in the world, inhabiting warm waters of the Pacific, Atlantic and Indian oceans.
- These turtles, along with their cousin the Kemps Ridley turtle, are best known for their unique mass nesting called Arribada, where thousands of females come together on the same beach to lay eggs.
- The species is recognized as **Vulnerable by the IUCN Red list**.

India's largest startup ecosystem inaugurated in Kerala

- Kerala government got India largest startup ecosystem.
- The Integrated Startup Complex under the Kerala Startup Mission

(KSUM) includes the ultra-modern facilities of Maker Village that promote hardware startups.

Related Information

What is a startup?

As per the Ministry of Commerce and Industry has described an entity as a 'startup':

1. Up to five years from the date of its incorporation/registration,
2. If its turnover for any of the financial years has not exceeded Rupees 25 crore, and
3. It is working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Startups: Points to note

- Any such entity formed by splitting up or reconstruction of a business already in existence shall not be considered a 'startup'.
- In order to obtain tax benefits a startup so identified under the above definition shall be required to obtain a certificate of an eligible business from the Inter-Ministerial Board of Certification consisting of:
a) Joint Secretary, Department of Industrial Policy and Promotion,
b) Representative of Department of Science and Technology,
c) Representative of Department of Biotechnology.
- An entity shall cease to be a startup on completion of five years from the date of its incorporation/registration or if its turnover for any previous year exceeds Rupees 25 crore.
- Entity means a private limited company (as defined in the Companies Act, 2013), or a registered partnership firm (registered under section 59 of the Partnership Act, 1932) or a limited liability partnership (under the Limited Liability Partnership Act, 2002).

1st Annual Disarmament, International Security Affairs Fellowship Programme

- Foreign Secretary Vijay Gokhale inaugurated the First Annual

Disarmament and International Security Affairs Fellowship Programme in New Delhi.

- Young Diplomats from 27 countries are participating in the Fellowship Programme.
- The programme aims at equipping participants with knowledge and perspectives on various issues related to disarmament, non-proliferation, arms control and international security.

Crocodile Annual Census

- The population of saltwater crocodiles in Bhitarkanika has increased with the
- It is inundated by the rivers Brahmani, Baitarani, Dhamra, Pathsala.

Related Information

- In 1975, the Union Ministry of Forest and Environment in collaboration with the UNDP had started a crocodile breeding and rearing project in Dangamala within the park.

MoU between India and Australia on the Safety in Mines, Testing and Research Station (SIMTARS)

- The Union Cabinet has given its approval for signing a MoU between Directorate General of Mines Safety (DGMS), Ministry of Labour and Employment, Government of India and Department of Natural Resource Mines and Energy, Queensland Government, Australia through the SIMTARS.
- The MoU will help in establishing a partnership between DGMS and SIMTARS for:
 - (a) implementation of the risk-based safety management system, providing training,
 - (b) setting up occupations safety and health academy and national mine disaster center, and modernizing R&D laboratory of DGMS.
- The MoU will become operative from the date of signing and remain in effect for three years.

Background:

- Mining accident rates in Australia is the lowest in the world.

annual census, which concluded recently, putting the head-count at 1,742.

- Last year, the enumerators had sighted 1,698 reptiles.

Bhitarkanika National Park

- It is located in the north-east region of Kendrapara district in the state of Odisha in eastern India.
- It is home to the largest population of estuarine crocodiles.
- It was designated as a national park on 16 September 1998 and as a Ramsar site by UNESCO on 19 August 2002.
- Australia has pioneered in conceptualizing and implementing risk-based Safety Management Plans for the mining sector using the technique of hazard identification and risk assessment.
- SIMTARS is known to have exclusive expertise in Mines Safety Management Systems.

Related Information

- Recently in Meghalaya, coal mines mishap happened which was result into the death of no. of people.

'Jai Kisan Rin Mukti Yojana

- MP government launched 'Jai Kisan Rin Mukti Yojana' scheme.
- It is Rs 50,000 crore farm loan waiver scheme for farmers.
- Only those farmers who have not registered themselves to pay GST and income tax can avail benefits under this scheme.

9th International Micro irrigation conference

- Union Water Resources Minister inaugurated 9th International Micro irrigation conference at Aurangabad, Maharashtra.
- The aim of the conference was to share experiences in the use of new technologies and best management practices in drip, micro-sprinkler, and other localized irrigation systems.
- The Theme of the conference was: **"Micro Irrigation and Modern Agriculture"**.

- The conference was organized by the Ministry of Water Resources and River Development.

Related Information

MICRO IRRIGATION

- Micro-irrigation is a modern method of irrigation through which water is irrigated through drippers, sprinklers, foggers and by other emitters on the surface or subsurface of the land.
- Drip irrigation is most suitable for wider spacing crops.
- The micro sprinkler irrigation system is mostly followed in sandy or loamy soils.
- This system is most suitable for horticultural crops and small grasses.

Advantages

- Water saving and higher yield
- High quality and increased fruit size
- Suitable for all types of soil
- Easy method of fertigation and chemigation
- Saving in labor and field preparation cost

Disadvantage

- High initial investment
- Clogging of emitters
- Possible damage to system components due to animals, etc.

RBI eases ECB norms, lifts sector-wise limits

- RBI has drawn up a new external commercial borrowing (ECB) framework allowing all eligible borrowers to raise up to \$750 million per financial year under the automatic route, replacing the existing sector-wise limits.
- The central bank has also expanded the list of eligible borrowers and recognized lenders.
- To curb volatility in the forex market arising out of dollar demand for crude oil purchases, the framework provides a special dispensation to public sector oil marketing companies.
- It allows them to raise ECB, with an overall ceiling of \$10 billion, for working capital purposes with a minimum average maturity period (MAMP) of three years under the automatic route without mandatory hedging & individual limit requirements.

- The list of borrowers has been expanded to include all entities eligible to receive FDI.

Maturity period

- While the minimum maturity period for the ECB will be three years, the framework allows manufacturing companies to raise up to \$50 million per financial year with a maturity period of one year.
- Further, if the ECB is raised from a foreign equity holder and utilized for working capital, general corporate purposes or repayment of rupee loans, the maturity period will be five years.

FDI (Foreign Direct Investment)

- A foreign direct investment (FDI) is an investment in the form of **controlling ownership in business in one country by an entity based in another country.**
- There are two routes by which India gets FDI.

(1) Automatic route- By this route, FDI is allowed without prior approval by Government or Reserve Bank of India.

(2) Government route- Prior approval by the government is needed via this route. Foreign Investment Promotion Board (FIPB) which was the responsible agency to oversee this route was abolished on May 24, 2017.

ASER 2018

- As per the Annual Status of Education Report (ASER) 2018, one out of every four Class 8 students in rural India is unable to read.
- The report was made after the survey conducted by an autonomous unit of education-NGO Pratham.
- The survey covered around 3.5 lakh households and 546,527 children between the ages of three and 16 across 596 rural districts.

Highlights:

- Moreover, over one in two, Class 8 students cannot solve a problem that involves basic division.
- Only a little more than half of all children enrolled in Class 5 can read a Class 2 level text.

- This improvement can be seen due to an improved performance by Himachal Pradesh, Uttar Pradesh, Odisha, Chhattisgarh, Karnataka, Kerala, Arunachal Pradesh, and Mizoram.
- The proportion of children not enrolled in school has fallen below 3% to 2.8% for the first time ever in India.
- Also, the percentage of girls in the 15-16 age group who were not enrolled in school dropped from 20% in 2008 to 13.5%.
- The number of schools with a serviceable girls' toilet doubled between 2010 and 2018 with two-thirds of all girls' schools in rural India having toilets.

Global Aviation Summit 2019

- The Ministry of Civil Aviation in collaboration with Federation of Indian Chambers of Commerce and Industry (FICCI) has organized Global Aviation Summit in Mumbai.
- The theme of Global Aviation Summit is **"Flying for all - especially the next 6 Billion"**.
- It aims to provide a platform for the stakeholders to brainstorm over the future of the aviation industry and identify the growth areas.
- It also gives the opportunity to highlight the latest concepts like drones, air taxis, new jets, and ultra-light aerial electric vehicles etc.

Related Information

- **Vision 2040** for the aviation sector was also launched during the summit.
- The vision document highlights the growth potential in different sub-sectors of Indian aviation and the key action steps which are required to be taken to achieve the desired objective.

First human rights TV channel

- The world's first television channel dedicated to human rights was launched in London by the International Observatory of Human Rights (IOHR).
- It would be a web-based channel and would deliver human rights issues to audiences in over 20 countries across

Europe, Latin America, and the Middle East.

- The programmes are currently broadcasted in English and eventually hopes to broadcast in other languages including Farsi, Turkish, Arabic and Russian.

Objectives

- The Human Rights Channel aims to deliver hidden stories ignored by mainstream media into people's living rooms.
- The Channel would focus on issues like refugees, press freedom and the incarceration of journalists, extremism, women's rights, LGBT+ issues and the plight of the world's stateless people.

Related Information

IOHR

- It is a non-profit NGO based in London.
- IOHR partners with local and international human rights group to drive and promote positive changes and push for justice and the respect of human rights worldwide.
- IOHR aims to defend the dignity of people stripped of their rights including unjustly jailed journalists, human rights defenders, refugees, and victims of oppression

Spiritual circuit in Kerala

- The PM recently inaugurated a project for the development of spiritual circuit comprising three important pilgrimage centers of Sree Padmanabha Swamy Temple, Aranmula and Sabarimala in Kerala.
- The Sree Padmanabaswamy Temple is one of the 108 divyadesams of Lord Vishnu.
- The project is being implemented under the Swadesh Darshan scheme of the tourism ministry.

Related Information

Swadesh Darshan Scheme:

- Swadesh Darshan scheme is one among the flagship schemes of the Ministry of Tourism for development of thematic circuits in the country in a planned and prioritized manner.
- The scheme was launched in 2014-15.

- Under this scheme, the Government is focussing on the development of quality infrastructure in the country with the objective of providing better experience and facilities to the visitors on one hand and on other hand fostering the economic growth.
- A National Steering Committee (NSC) will be constituted with Minister in charge of Ministry of Tourism as Chairman, to steer the mission objectives and vision of the scheme.

Congenital Central Hypoventilation Syndrome (CCHS)

- Recently an infant under treatment in New Delhi Hospital is suffering from a rare disease 'Congenital Central Hypoventilation Syndrome (CCHS)'.

About the Disease

- It is a very rare disease with less than 1,000 known cases all over the world.
- The person suffering from this disease can lose their life if they fall into deep sleep.
- It is a disorder of the nervous system in which the cue to breathe is lost when the patient goes to sleep.
- This results in a lack of oxygen and a buildup of carbon dioxide in the body.
- Lack of breathing turns the lips into the blue.
- It is also known as Ondine's Curse. (Ondine is a French mythology character.)

Cause

- The mutation of a gene called PHOX2B can cause CCHS.
- This gene is crucial for the maturation of nerve cells in the body.

Treatment

- Treatment typically includes mechanical ventilation or use of a diaphragm pacemaker.
- People who have been diagnosed as newborns should be ventilated throughout childhood so that they can live independently.

Task Force report on Space Technology in Border Management

- The Union Home Minister has approved the report of Task Force created by MHA to identify areas for

use of Space Technology in improving Border Management.

- Following areas have been identified for use of space technology:
 - (i) Island development
 - (ii) Border Security
 - (iii) Communication and Navigation
 - (iv) GIS and Operations Planning System
 - (v) Border Infrastructure Development
- To execute the project in a timebound manner, a short, medium and long term plan have been proposed for implementation in five years in close coordination with ISRO and Ministry of Defence.
- Deployment of Central Armed Police Forces (CAPFs) in remote areas will be also coordinated by satellite communications.
- Indian Regional Navigation Satellite System (IRNSS) -based GPS will provide navigation facilities for operational parties in high altitude, remote and difficult borders, and Naxal areas.
- BSF has been designated as lead agency for implementation of ground segment and network infrastructure including the establishment of Archival Facility.

Saksham 2019

- 'Saksham', an annual high-intensity mega campaign launched by Petroleum Conservation Research Association (PCRA) under the aegis of the Ministry of Petroleum and Natural Gas.
- The campaign aims at promoting the citizens to participate in fuel conservation for health & environment protection.
- It simultaneously helps in reducing India's dependency on import of crude oil.

PCRA

- It is a registered society set up under the aegis of Ministry of Petroleum & Natural Gas, Government of India.
- This non-profit organization is a national government agency engaged in promoting energy efficiency in various sectors of the economy.

- It helps the government in proposing policies and strategies for petroleum conservation.

Jallikattu

- Recently, a total of 29 people sustained minor injuries at the Jallikattu event held in Alanganallur Tamil Nadu.

Related Information

- Jallikattu is a traditional spectacle in which a bull, such as Kangayam breeds, is released into a crowd of people, and multiple human participants attempt to grab the large hump on the bull's back with both arms and hang on to it while the bull attempts to escape.
- Jallikattu is typically practiced in the Indian state of Tamil Nadu as a part of Pongal celebrations on Mattu Pongal day.

Note: The animal rights organizations have called for a ban on the sport, resulting in the court banning it several times over the past years. However, with protest from the people against the ban, a new ordinance was made in 2017 to continue the sport.

Global Risks Report

- The Global Risks Report 2019 of the World Economic Forum (WEF) describes changes occurring in the global risks landscape from year to year and identifies global catastrophic risks.

- The report also examines the interconnectedness of risks and considers how the strategies for the mitigation of global risks might be structured.

Highlights of the report

- The report has predicted the following major risks under five categories:

(a) Economic

- Asset bubbles in a major economy

(b) Environmental

- Extreme weather events
- Failure of climate change mitigation and adaptation
- Natural disasters
- Man-made environmental disasters
- Biodiversity loss and ecosystem collapse
- Failure of climate change mitigation and adaptation

(c) Geo-Political

- Weapons of mass destruction

(d) Societal

- Large-scale involuntary migration
- Water crises
- A spread of infectious diseases

(e) Technological

- Data fraud or theft
- Cyber-attacks
- Critical information infrastructure breakdown

Note: The report warns about growth in 2019 getting held back by continuing geo-economic tensions, with 88 percent of respondents expecting further erosion of multilateral trading rules and agreements.

Important reports published by Various organization

Name of the Reports	International Organization
World Economic Outlook	International Monetary Fund (IMF)
Global Financial Stability Report	International Monetary Fund (IMF)
Global Money Laundering Report	Financial Action Task Force (FATF)
Global Economic Prospects	The World Bank
World Development Report	The World Bank
Ease of Doing Business	The World Bank
Environmental Performance Index	World Economic Forum
Global Competitive Index	World Economic Forum
Global Gender Gap Report	World Economic Forum
The Global Risk Report	World Economic Forum
Human Capital Report	World Economic Forum
Human Development Index	United Nations Development Programme (UNDP)
Sustainable development Goals	United Nations Development Programme (UNDP)
Gender Inequality Index	United Nations Development Programme (UNDP)
Global Hunger Index	International Food Policy Research Institute (IFPRI)

Common Pochard

- Delay in migratory birds like 'Common Pochard' visiting Delhi has worried the environmentalists and bird-lovers etc.

Common Pochard

- Common Pochard is a medium-sized duck.
- It migrates to India from central Asia in October.
- The number of the species is declining globally because of climate and anthropological reasons.
- **IUCN status- Vulnerable**

Rupee pact with Iran to aid pharma exports

- The Indian pharma industry now has an opportunity to increase exports to Iran, following a rupee payment mechanism agreed upon recently by India and the Persian Gulf nation.
- Under the agreement, Indian refiners make payments in rupee for oil imports from Iran.
- It has designated accounts maintained with UCO Bank.
- A portion thus received is to be used by Iran to pay for imports from India, including pharmaceuticals.

Related Information

- Iran has a well-established pharma industry that meets 80% of the country's requirement.
- Indian pharma exports to Iran were at \$124.05 million last fiscal.
- The remaining 20% is met predominantly through imports from Europe.

Cabinet approves recapitalization of Export-Import Bank of India

- The Union Cabinet has approved the recapitalization of EXIM Bank.
- The details are as follows:
 - (i) Issuance of Recapitalization Bonds by GOI to the tune of Rs.6,000 crore for capital infusion in Export-Import Bank of India (Exim Bank).
 - (ii) The equity will be infused
- The Cabinet also approved an increase in the authorized capital of Exim Bank from Rs. 10,000 crore to Rs. 20,000 crore.

- The recapitalization bonds will be on the lines issued to Public Sector Banks.

Major Impact:

- Exim Bank is the principal export credit agency for India.
- The infusion of capital into Exim Bank will enable it to augment capital adequacy and support Indian exports with enhanced ability.
- The infusion will give an impetus to anticipate new initiatives like supporting Indian textile industries, likely changes in Concessional Finance Scheme (CFS), likelihood of new LoCs in future in view of India's active foreign policy and strategic intent.

Exim Bank of India

- It was established in 1982 under an Act of Parliament as the apex financial institution for financing, facilitating and promoting India's international trade.
- The Bank primarily lends for exports from India including supporting overseas buyers and Indian suppliers for export of developmental and infrastructure projects, equipment, goods, and services from India.
- It is regulated by RBI.

Sita Rama project gets Centre's nod

- The Union Ministry of Environment, Forest and Climate Change has given its approval for the Sita Rama Lift Irrigation Project of Telangana.
- The project would be completed in three years and would lead to submergence of about 1,930-hectare area and 157 villages.

Sita Rama Lift Irrigation Project

- The project aims to divert Godavari river water to irrigate 2.72 lakh hectares in three districts of Bhadradi Kothagudem, Khammam and Mahabubabad districts of Telangana.
- The water from River Godavari will be diverted from the upstream of existing Dummugudem Anicut barrage.
- Head regulator would be constructed at Dummugudem Anicut on Godavari

river and lined canal of about 372 km would be constructed.

Humans are closer to setting up a base on Moon'

- China's Chang'e-4 lander successfully grew a cotton plant on the Moon, but it died soon after.
- This one is a first to grow a plant in a controlled environment on the Moon.
- The significance, of course, is that we now have positive confirmation that we can grow food in controlled environments on the Moon.
- In space, almost anything can be grown there because we are speaking of controlled environments and hence perhaps the only limiting factors are the abiotic factors like water, light etc.

Note: India is yet to send a spacecraft which can do such experiments on the lunar surface or in space.

UNNATI programme

- Minister of State in Department inaugurated the 1st batch of UNNATI programme of Indian Space Research Organisation (ISRO) in Bengaluru, Karnataka.
- UNNATI stands for **Unispace Nanosatellite Assembly and Training programme**.
- It has been launched by ISRO as part of an initiative by United Nations Office for Outer Space Affairs to commemorate the 50th anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE-50).

UNNATI

- Under the program, India will provide 2 months training to 32 participants from 18 countries from Algeria, Argentina, Azerbaijan, Bhutan, Brazil, Chile, Egypt, Ethiopia, Indonesia, Kazakhstan, Malaysia, Mexico, Mongolia, Morocco, Myanmar, Oman, Panama and Portugal.
- Overall, the programme would be conducted for 3 years by U.R. Rao Satellite Centre of ISRO.
- It has 3 batches and will target to benefit officials of 45 countries.

Manipur's new anti-lynching law

- Supreme Court issued a slew of directions to the Union and State

governments to protect India's 'pluralist social fabric' from mob violence six months before.

- SC described Mob lynching as 'horrific acts of mobocracy'.
- The court felt compelled to act in the shadow of four years of surging hate violence targeting religious and caste minorities. It also urged Parliament to consider passing a law to combat mob hate crime.
- Manipur became the first to pass a remarkable law against lynching.
- Its definition of lynching is comprehensive, covering many forms of hate crimes.
- These are "any act or series of acts of violence or aiding, abetting such act/acts thereof, whether spontaneous or planned, by a mob on the grounds of religion, race, caste, sex, place of birth, language, dietary practices, sexual orientation, political affiliation, ethnicity or any other related grounds.

Nagaland can reject Citizenship Bill

- Recently, Nagaland, along with other northeastern States, has witnessed several protests following the passage of the Citizenship bill 2016 Bill in the Lok Sabha.

Related Information

Article 371(A)

- Special provision with respect to the State of Nagaland
(1) Notwithstanding anything in this Constitution,
(a) no Act of Parliament in respect of
(i) religious or social practices of the Nagas,
(ii) Naga customary law and procedure,
(iii) administration of civil and criminal justice involving decisions according to Naga customary law,
(iv) ownership and transfer of land and its resources shall apply to the State of Nagaland unless the Legislative Assembly of Nagaland by a resolution so decides;
(b) The Governor of Nagaland shall have special responsibility with

respect to law and order in the State of Nagaland

- Nagaland is also protected by the Bengal Eastern Frontier Regulation of 1873, whereby an Inner Line Permit is issued to outsiders for safeguarding the citizenship, rights, and privileges of the Nagas.

Why Assam and other NE states are opposing this bill?

- The bill seeks to facilitate granting of Indian citizenship for non-Muslim migrants from Bangladesh, Pakistan, and Afghanistan.

Inner Line Permit

- Inner Line Permit (ILP) is an official travel document issued by the Government of India to allow inward travel of an Indian citizen into a protected area for a limited period.
- It is obligatory for Indian citizens from outside those states to obtain a permit for entering into the protected state.
- Currently, there are 3 states have a provision of Inner Line Permit. These states are- Arunachal Pradesh, Mizoram, Nagaland.

Light Combat Helicopter Completes Weapon Trials

- Light Combat Helicopter (LCH) designed and developed by Rotary Wing Research & Design Centre (RWRDC) of HAL has successfully carried out an air-to-air missile test.
- It was for the first time in India that a helicopter had carried out air to air missile engagement.
- It was developed in response to the operational needs of Indian Armed Forces and its capabilities far exceed that of contemporary attack helicopters of its class.

Features of the LCH

- It is the only attack helicopter in the world which is capable of operating at altitudes as high as the location of Siachen glacier.
- It is mounted with a helmet mounted sight and a forward-looking infrared sighting system.
- This advance sighting system will enable the pilot to launch a missile onto any target without having to turn the helicopter.

- The LCH is capable of operating from dispersed locations and flying at ultra-low levels.
- This provides a protective umbrella from all aerial threats.

Rajasthan's State bird may be extinct soon

- Recently, the report revealed that Rajasthan state bird 'The Great Indian Bustard' may be extinct soon only 50 Great Indian Bustards left in the wild.

Initiatives are taken by the government

- The Rajasthan government proposed setting up of captive breeding centers at Sorsan in Kota district and a hatchery in Jaisalmer's Mokhala village for the conservation of the State bird of Rajasthan almost two years ago but failed to save these critically endangered birds.
- The Union Ministry of Environment, Forest and Climate Change facilitate the two centers and authorized the Wildlife Institute of India for the saving of this species.

Related Information

Great Indian Bustard

- It is a bustard found on the Indian subcontinent.
- These birds are often found associated in the same habitat as blackbuck.
- It is protected under the Wildlife Protection Act 1972 of India.
- Males have a well-developed gular pouch which is inflated when calling during display and helps produce the deep resonant calls.

- **IUCN status: Critically Endangered**

Note: An incubation unit set up at Jaisalmer district's Sudasri — considered the sanctum sanctorum of the Desert National Park — for these Great Indian Bustard.

India ranks third in research on artificial intelligence

- India ranks third in the world in terms of high-quality research publications in artificial intelligence (AI).
- India came third in the world with 12,135 documents trailed behind China with 37,918 documents and

the United States with 32,421 documents.

Related Information

India in Artificial Intelligence

- India's traditional strength in information technology and AI said to pose a transformation in industry and academic circles, the report was an attempt at mapping the state of AI-based research in India.
- There were only about 50 to 75 principal researchers in the AI-space in India and they were tended to collaborate with each other.
- The Indian Institutes of Technology and the Indian Institutes of Information Technology were among the key centers for AI research.
- NITI Ayog in June 2018 released a discussion paper on the transformative potential of AI in India that said the country could add \$1 trillion to its economy by integrating AI into its economy.
- Healthcare, financial services, monsoon forecasting, retail, and education were the key fields likely to benefit from AI and the field was "unlikely to lead" to the destruction of jobs a key global concern regarding the field.

DD to start its own OTT platform

- Recently Doordarshan, India's public service broadcaster, is working towards plans to launch its own OTT (over-the-top) platform to stream content to viewers over the Internet.
- Doordarshan is also planning to have its own digital platform where it can put out its content which can be available worldwide.

Related Information

Doordarshan (DD)

- It is an autonomous public service broadcaster funded by the GOI, owned by the Broadcasting Ministry of India and one of Prasar Bharati's two divisions.
- It was established on 15 September 1959.
- It also broadcasts on digital terrestrial transmitters, provides television, radio, online and mobile service throughout metropolitan and regional

India and overseas through the Indian Network and Radio India.

Satellite to deliver the world's first artificial meteor shower blasted into space

- A rocket carrying a satellite on a mission to deliver the world's first artificial meteor shower blasted into space.
- A start-up based in Tokyo developed the micro-satellite for the celestial show over Hiroshima early next year as the initial experiment for what it calls a "shooting stars on demand" service.
- The satellite is to release tiny balls that glow brightly as they hurtle through the atmosphere, simulating a meteor shower.
- It hitched a ride on the small-size Epsilon-4 rocket that was launched from the Uchinoura space center by the Japan Aerospace Exploration Agency (JAXA).
- The rocket carried a total of seven ultra-small satellites that will demonstrate various "innovative" technologies.

District Mineral Fund

- PMKKKY is aimed at providing welfare to those affected by mining operations.
- Under the programme, a portion of revenues (10-30 percent of the royalty proceeds from the minerals) is earmarked for development activities in mining regions.
- With just 24 percent of the ₹23,606-crore mopped up under the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) actually spent, the Centre has advised States to increase the spending under the District Mining Fund (DMF) programme while ensuring that there is no fund diversion or leakage.

Related Information

Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)

- It is aimed at the welfare of areas and people affected by mining-related operations, using the funds generated by District Mineral Foundations (DMFs).
- The scheme mandates that 60 % share of the funds be spent on high priority areas like drinking water supply, health care, sanitation,

education, skill development, women and child care, the welfare of aged and disabled people, skill development and environmental conservation.

- The funds accumulated in the District Mineral Funds would be used for implementing PMKKKY.

Young Scientist Programme

- ISRO has announced the 'Young Scientists Programme' to encourage the scientific talent and increase scientific pool in the country
- In this program, three students, eighth standard pass, will be selected from each of the 29 states and seven Union Territories.
- They will spend one month at ISRO during which they will be given lectures, get access to research and development and will be given the experience to build a satellite.
- This programme is similar to NASA's student outreach.

Diffo Bridge inaugurated in Arunachal Pradesh

- Defence Minister inaugurated the Diffo Bridge over Chipu River in Lower Dibang Valley District.
- The bridge is 426 meters in length and its work started in 2011.
- The project is completed by Border Roads Organisation.

Border Roads Organisation (BRO)

- The Border Roads Organisation (BRO) develops and maintains road networks in India's border areas and friendly neighboring countries.
- The BRO was formed on 7 May 1960.

Protest against proposed bird sanctuary in Manipur

- The Manipur government's plan to set up a bird sanctuary at the Loktak lake in Bishnupur district has met with stiff opposition from the villagers in nearby areas.

Concern:

- Thousands of migratory birds flock to the Loktak lake, the largest freshwater lake in north-eastern India, every year but in the past few years there has been a sharp decline in the number of migratory birds coming to the lake.

- The Brow-antlered deer which are endangered is also facing the problem of poaching.

Related Information

Loktak Lake

- Loktak Lake is the largest freshwater lake in Northeast India and is famous for the phumdis (heterogeneous mass of vegetation, soil and organic matter at various stages of decomposition) floating over it.
- Keibul Lamjao National Park is the only floating national park in the world on this Phumdis.
- The park is the last natural refuge of the endangered Sangai (state animal), one of three subspecies of Eld's deer.
- It was also listed under the Montreux Record on 16 June 1993, "a record of Ramsar sites where changes in ecological character have occurred, are occurring or are likely to occur."

19 amphibian species are critically endangered: ZSI list

- Recently an updated list of Indian amphibians was released on the Zoological Survey of India (ZSI) in which 19 species being treated as critically endangered and 33 species as endangered.
- It highlights 19% of amphibians as data deficient species and about 39% as not assessed by IUCN.
- The list is updated and launched by ZSI from time to time as per the International Union for Conservation of Nature (IUCN).

Related Information

Zoological Survey of India (ZSI)

- It is founded on 1 July 1916 by GOI, Ministry of Environment, Forest and Climate Change, as premier Indian organization in zoological research and studies to promote the survey, exploration, and research of the fauna in the country.
- ZSI (zoology) as well as ASI (archaeology), BSI (botany), FSI (forests), FiSI (fisheries), GSI (geology), IIEE (ecology), NIO (oceanography), RGCCI (Census of India) and SI (cartography) are key national survey organisations of India.

International Solar Alliance plans bank to fund energy access

- The International Solar Alliance (ISA) is going to propose a new bank exclusively for financing energy access to billions.
- The bank is still at the ideation stage.
- ISA has asked the Asian Development Bank to prepare a concept note.
- A public-private partnership is being thought of for the proposed, which will work for 1.2 billion people who lack access to energy as well as the 2.4 billion who lack access to clean energy.

Related Information

- According to a recent World Bank report, 600 million people would continue to have no access to energy even in 2040.
- Existing banks do not focus on universal energy access—those still deprived are the poorest of the poor.
- The bank should first target energy access and then focus on clean energy.

Indian Scenario

- Renewable energy got a boost in 2015 when India decided to install 175 gigawatt capacity of such energy by 2022.

International Solar Alliance (ISA)

- The ISA is an Indian initiative, jointly launched by the Prime Minister of India, Shri Narendra Modi and the President of France on 30th November 2015 in Paris, on the side-lines of COP-21, the UN Climate Conference.
- The alliance's primary objective is—
(a) Work for the efficient exploitation of solar energy to reduce dependence on fossil fuels.
(b) Mobilize \$1 trillion in funds for future solar generation, storage and technology across the world.
- The ISA, headquartered in India, has its Secretariat located in the Gwalpahari, Gurgaon, Haryana.
- India has offered to meet ISA Secretariat expenses for an initial five years.

Global Economy Watch by PwC

- Global Economy Watch report has been released by London based

multinational professional services network- PricewaterhouseCoopers (PwC).

- It is a short publication that looks at the trends and issues affecting the global economy and details its latest projections for the world's leading economies.
- The report notes that the global economy as a whole is expected to slow in 2019 as G7 countries return to long-run average growth rates.
- The main focus of tensions is likely to remain US-China trade, but there will always be the risk of this escalating into a wider trade conflict and businesses accordingly need to plan for different scenarios.

Highlights of Indian's economy ranking 2019

- India is likely to surpass the United Kingdom in the world's largest economy rankings in 2019.
- As per the report, while the UK and France have regularly switched places owing to similar levels of development and roughly equal populations, India's climb up the rankings is likely to be permanent.
- The report projects real GDP growth of 1.6% for the UK, 1.7% for France and 7.6% for India in 2019.
- India should return to a healthy growth rate of 7.6% in 2019-20 if there are no major headwinds in the global economy such as enhanced trade tensions or supply-side shocks in oil.
- The growth will be supported through the further realization of efficiency gains from the newly adopted GST and policy impetus expected in the first year of a new government.

Operation Kabaddi'

- Former army commanders have revealed the details of this operation in the book, **Line on Fire: Ceasefire Violations and India-Pakistan Escalation Dynamics**.
- It was to be the largest planned operation by the Indian Army to end cross-LoC infiltration by capturing at least 25 selected Pakistani posts along the Line of Control (LoC) in

September 2001. But due to some issues, it was not carried out.

- The objective of Operation Kabaddi was to change the geography of the LoC with access to tactical points there, which would then help the Army tackle the infiltration of militants by the Pakistani side.
- Operation Kabaddi would include a "wide spectrum of evolving punitive operations such as the:
 1. execution of deliberate fire assaults to destroy military and terrorist points,
 2. area targets across the LoC
 3. ambushes and raids across the LOC etc.

Rio de Janeiro recognized as World Capital of Architecture 2020

- Rio de Janeiro has been recognized as 'World Capital of Architecture' for 2020 by The United Nations Educational, Scientific and Cultural Organisation (UNESCO).
- Rio de Janeiro will be hosting the World Congress of the International Union of Architects (UIA) in July 2020.
- The theme of the 2020 World Congress of the International Union of Architects is **"All the worlds. Just one world."**

Related Information

World Capital of Architecture

- The World Capital of Architecture initiative underscores the common commitment of UNESCO and the UIA to preserve architectural heritage in the urban context.
- UNESCO designates the World Capital of Architecture as per the partnership agreement with the UIA.
- The World Capital of Architecture also hosts the UIA's World Congress, an event that takes place every three years.

Madhu Babu Pension Yojana scheme

- Odisha CM hiked Rs.200 per month under Madhu Babu Pension Yojana (MBPY).

Related Information

Madhu Babu Pension Yojana

- Odisha government launched Madhu Babu Pension Yojana in 2008, by merging two pension schemes – Old

Age Pension and Odisha Disability Pension schemes

- It's objective of providing financial assistance to the destitute elderly and destitute differently abled persons in the state.

"Alliance to End Plastic Waste" (AEPW) to eliminate plastic waste launched

- Several organizations launched a new firm to improve ways to eliminate plastic waste in the environment, especially in the water bodies.
- The cross-value chain Alliance to End Plastic Waste (AEPW), currently made up of nearly 30 member companies, has committed over USD 1.0 billion with the goal of investing USD 1.5 billion over the next five years to help end plastic waste in the environment.
- The global companies alliance will develop and bring to scale solutions that will minimize and manage plastic waste and promote solutions for used plastics by helping to enable a circular economy.
- The alliance is a not-for-profit organization that includes companies that make, use, sell, process, collect and recycle plastics.
- This includes chemical and plastic manufacturers, consumer goods companies, retailers, converters, and waste management companies, also known as the plastics value chain.
- The alliance has been working with the World Business Council for Sustainable Development as a founding strategic partner.

Africa and Asia come together to lead a global initiative "Smart Food Executive Council" to diversify staples

- In a first, the largest agriculture associations in Africa and Asia met on January 13, 2019, in Hyderabad to sign an agreement for diversifying major food staples.
- Associations including
 - (a) Asia-Pacific Association of Agricultural Research Institutions (APAARI),
 - (b) Forum for Agricultural Research in Africa (FARA),
 - (c) West and Central African Council for Agricultural Research and Development (CORAF),

- (d) Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN), and
- (e) International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) got together to form the Smart Food Executive Council.

Smart Food Executive Council

- It has been formed under the aegis of the Smart Food Initiative that was launched in 2013 and stemmed from the strategic thinking around the need for food that fulfills the criteria of being good for the consumer, good for the planet and good for the farmer.
- This would contribute to the SDGs for (a) Overcoming poverty and hunger (SDG 1 and 2), (b) Responsible consumption and production (SDG 12), along with adaptation to climate change (Goal 13). (c) The approach taken will include gender equality (SDG 5) and action through partnerships (SDG 17).
- This new partnership strengthens collaborations between Asia and Africa and can open up opportunities to join forces at any point along the value chain, from consumers through to processors, chefs through to farmers, researchers and others.

Arunachal government declares Pakke Hornbill Fest as 'state festival'

- Pakke Paga Hornbill Festival (PPHF) is only conservation festival of Arunachal Pradesh.
- PPHF festival is celebrated to the first time in 2015 to recognize the role played by the resident Nyishi tribe in conserving hornbills in the Pakke Tiger Reserve.

Great Indian Hornbill

- It is predominantly fruit eating, but is an opportunist and preys on small mammals, reptiles and birds.
- IUCN status: Vulnerable (uplisted from Near Threatened in 2018).
- It is also listed in Appendix I of CITES.

Triple-drug therapy for lymphatic filariasis

- Maharashtra is all set to roll out the WHO-recommended triple-drug therapy for lymphatic filariasis to speed up the elimination of the disease.
- It is a pilot project which is rolled out in Nagpur.

- Nagpur is one of the five districts in the country and only one in Maharashtra where this triple-drug therapy campaign is being launched.

Triple drug therapy

- WHO is recommending three drug treatment to accelerate the global elimination of lymphatic filariasis.
- The treatment, known as IDA, involves a combination of ivermectin, diethylcarbamazine citrate and albendazole.
- It is being recommended annually in settings where its use is expected to have the greatest impact.
- The third drug is used in this therapy will help control adult worms of lymphatic filariasis.
- Micro filariasis, which is produced by adult worms, is the cause of a swollen leg.

Related Information

Lymphatic filariasis (elephantiasis)

- It is a neglected tropical disease.
- According to the WHO, infection occurs when filarial parasites are transmitted to humans through mosquitoes.
- The infection is usually acquired in childhood, causing hidden damage to the lymphatic system.
- The parasites are transmitted by four main types of mosquitoes: Culex, Mansonia, Anopheles and Aedes.

Note: India has missed earlier deadlines to eradicate the disease by 2015 and 2017. The global deadline now is 2020 and the three-drug approach may help the country get it.

Project ReWeave

- Project Rewave is e-commerce platform "re-wev.in" launched by **Microsoft in 2016** to help handloom weavers.
- It will help to connect artisans to the buyers directly enabling them to expand to newer customers and markets.
- It also provides a platform to showcase signature collections created by the weaver communities, showcase traditional designs and products created from natural dyes to a broad set of customers.

- It helps in increasing the waiver their income and earning a sustainable livelihood while also reviving traditional forgotten Indian art.
- Under the initiative, Microsoft is working closely with NGO partner, Chaitanya Bharathi to provide infrastructure, financing and marketing support to help weaver families keep their weaving traditions alive by sustaining livelihoods.

National Social Assistance Programme (NSAP)

- The Rural Development Ministry has proposed to bring in the following changes in monthly pensions under the National Social Assistance Programme (NSAP):
 - (a) For the elderly poor, disabled and widows pensions are to be increased from the current ₹200 to ₹800.
 - (b) For those above the age of 80, the proposal is to increase the pension from ₹500 to ₹1,200 a month.

About Programme

- It is a Centrally Sponsored Scheme under the Ministry of Rural Development.
- It represents a significant step towards the fulfilment of the DPSP in Article 41 of the Constitution.
- In Article 41 of the Constitution of India directs the State to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement and in other cases of undeserved want within the limit of its economic capacity and development.
- Presently NSAP comprises of five schemes, namely:
 - Indira Gandhi National Old Age Pension Scheme (IGNOAPS).
 - Indira Gandhi National Widow Pension Scheme (IGNWPS).
 - Indira Gandhi National Disability Pension Scheme (IGNDPS).
 - National Family Benefit Scheme (NFBS).
 - Annapurna

World Economic Outlook Report

- The International Monetary Fund (IMF) has released an update of its

biennial World Economic Outlook Report 2018.

Highlights of report

- India's GDP is forecasted to expand 7.5% in FY20 and 7.7% in FY21.
- China's growth is seen at 6.2% in both years.
- The global economy is projected to grow by 3.5% in 2019 and 3.6% in 2020.

About the report

- It is a survey conducted and published by the International Monetary Fund.
- It is published biannually and partly updated two times a year.
- WEO forecasts include key macroeconomic indicators such as GDP, inflation, current account and fiscal balance of the countries around the globe.
- It also deals with major economic policy issues.

Oxfam Annual Wealth Check report 2019

- The Annual Wealth Check report 2019 released by Oxfam an international rights group.
- The release of the report marked the start of the annual Meeting World Economic Forum in Davos, Switzerland.
- The important features of the report are:
 - (a) 26 richest billionaires own as many assets as the 3.8 billion people who make up the poorest half of the world.
 - (b) The 12 percent increase in the wealth of the very richest contrasted with a fall of 11 per cent in the wealth of the poorest half of the world's population
 - (c) The widening gap is hindering the fight against poverty.
- The report estimates that a wealth tax of 1% would raise an estimated \$418bn (£325bn) a year.
- This would be enough to educate every child, not in school and provide healthcare that would prevent 3 million deaths.

Facts about India

- The top 1% of India's richest lot got richer by 39% as against just 3% increase in the wealth for the bottom half of the population.
- 6 Crore Indians who make up the poorest 10 percent of the country, continued to remain in debt since 2004.
- Top 10% of the richest population in India holds 77.4% of the total national wealth.
- In many countries including India, a decent education or quality healthcare has become a luxury only the rich can afford.
- Children from poor families in India are three times more likely to die before their first birthday than children from rich families.
- The calculations and interpolations in the report were based on the data from the latest comprehensive data sources available publicly, including from the Credit Suisse Wealth Databook and the annual Forbes Billionaires

Sea Vigil 2019

- It is the first-of-its-kind exercise will be undertaken along the entire coastline and Exclusive Economic Zone (EEZ) of India.
- The Navy in coordination with the Coast Guard and other stakeholders will conduct a two-day defence exercise along the coastline.
- The exercise is codenamed as "Sea Vigil 2019" and it is the first exercise on such a large scale.
- It will involve all the coastal States and Union Territories, maritime stakeholders including the fishing and coastal communities.
- The exercise is a build-up towards the major 'Theatre Level Readiness and Operational Exercise (TROPEX)' that the Indian Navy conducts every two years.
- SEA VIGIL and TROPEX will together cover the entire spectrum of maritime security, including the transition from peace to conflict.

Bihar posted the highest rise in state GDP in 2017-18

- Bihar and Andhra Pradesh led the pack among States in terms of GDP growth in financial year 2017-18, clocking 11.3% and 11.2% growth, respectively, compared with the national GDP growth of 6.7% for the year, according to a report by Crisil.

Highlights of the Report

- According to the report, 12 of the 17 general category States grew faster than the national growth rate.
- The growth was not equitable, with the gap between the per capita incomes in low-income and high-income States widening over the last five years.
- In fiscal 2018:
 - (a) Bihar, Andhra Pradesh, and Gujarat were top-rankers in terms of Gross State Domestic Product (GSDP) growth among the 17 non-special States considered in our analysis.
 - (b) Jharkhand, Kerala, and Punjab were at the bottom.
- The analysis found that between the financial years 2012-13 and 2016-17, Gujarat, Madhya Pradesh and Karnataka were the fastest growing states, on average.
- West Bengal, Jharkhand and Bihar had ranked at the bottom in the past five years.
- In Gujarat and Karnataka, manufacturing was the main driver, while in Madhya Pradesh, agriculture and allied activities drove growth on average.
- On the fiscal front most veered off the Fiscal Responsibility and Budget Management Act (FRBM) line of maintaining their fiscal deficits at 3% of their respective state GDPs.
- Rajasthan, Jharkhand and Uttar Pradesh topped the tally in the proportion of capex in state spending in the past three years.
- The combined fiscal deficit of States crossed the 3% of GSDP threshold, in both fiscals 2016 and 2017.
- This improved in fiscal 2018 to 3.1%, but this was still higher than the FRBM limit.

Fiscal Responsibility and Budget Management (FRBM) 2003

- It is an Act of the Parliament of India to
 - (a) institutionalize financial discipline,
 - (b) reduce India's fiscal deficit,
 - (c) improve macroeconomic management and
 - (d) the overall management of the public funds by moving towards a balanced budget and strengthen fiscal prudence
- The main purpose was to eliminate the revenue deficit of the country and bring down the fiscal deficit to a manageable 3% of the GDP by March 2008.
- However, due to the 2007 international financial crisis, the deadlines for the implementation of the targets in the act was initially postponed and subsequently suspended in many times in due to various reasons.
- Budget 2018-19 proposed amending the FRBM Act again, which shifted the target of 3% fiscal deficit-GDP ratio to end-March 2021.

Cabinet approves the creation of the National Bench of the "GSTAT"

- The Union Cabinet has approved the creation of National Bench of the Goods and Services Tax Appellate Tribunal (GSTAT).
- The National Bench of the Appellate Tribunal shall be situated at New Delhi.
- GSTAT shall be presided over by its President and shall consist of one Technical Member (Centre) and one Technical Member (State).

Related Information GSTAT

- It is the form of the second appeal in GST laws and the first common forum of dispute resolution between Centre and States.
- The appeals against the orders in first appeals issued by the Appellate Authorities under the Central and State GST Acts lie before the GST Appellate Tribunal, which is common

under the Central as well as State GST Acts.

- Being a common forum, GST Appellate Tribunal will ensure that there is uniformity in redressal of disputes arising under GST, and therefore, in the implementation of GST across the country.
- Chapter XVIII of the CGST Act provides for the Appeal and Review Mechanism for dispute resolution under the GST Regime. Section 109 of this Chapter under CGST Act empowers the Central Government to constitute, on the recommendation of Council.

e-NAM portal

- The first inter-State trade on e-Nam between Andhra Pradesh and Telangana has been carried out recently between farmer from Gadwal mandi in Telangana State.

Related Information

e-NAM

- The e-NAM platform is pan-India electronic trading (e-trading) portal to network the existing physical regulated wholesale market (known as APMC market) through a virtual platform to create a unified national market for agricultural commodities.
- This portal is implemented by the Ministry of Agriculture & Farmers' Welfare.

Objective

- To provide competitive and remunerative price to farmers for their products through an online competitive and transparent bidding process.
- It integrates Central Farmer Database to increase the efficiency and reduce queue time.
- It seeks to increase the number of traders and greater competition. It will also ensure open price discovery and better returns to farmers.

National Girl Child Day

- The Women & Child Development Ministry will celebrate National Girl Child Day (NGCD) in New Delhi.
- The programme will also observe the anniversary of Beti Bachao Beti Padhao (BBBP) Scheme.

- The theme of this NGCD is **"Empowering Girls for a Brighter Tomorrow"**

Objectives

- Generating awareness on the issue of declining Child Sex Ratio (CSR)
- create a positive environment around valuing the girl child.

Beti Bachao Beti Padhao (BBBP) Scheme

- Beti Bachao Beti Padhao (BBBP) Scheme was launched by Hon'ble Prime Minister in 2015 at Panipat in Haryana.
- It is a tri-ministerial effort of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development.
- BBBP Scheme is a Central Sector Scheme with 100% financial assistance for District level component and the fund are directly released to the DC/DM's account for the smooth operation of the Scheme.

Roshni: An app to help the visually impaired

- To assist visually impaired people to easily determine the denomination of currency notes, the Indian Institute of Technology at Ropar in Punjab has developed an app called "Roshni", using image processing and analytics.

How does this app work?

- This App utilises an adaptable deep learning framework, which further uses the patterns and features embedded on the notes to differentiate and determine the currency denomination.
- The IPSA (Image processing, Security and Analytics) have a rich dataset of more than 13, 000 images of currency notes under varied real-world conditions.
- The user has to bring the currency note in front of the phone camera and the App would provide audio notification intimating the currency note denomination to the user.

Pravasi Bharatiya Divas

- The 15th Pravasi Bharatiya Divas (PBD) was held in Varanasi (Uttar Pradesh).

- Its theme was **"Role of Indian Diaspora in building a New India"**.
- It was organized by the Ministry of External Affairs (MEA) in association with the government of Uttar Pradesh.

Pravasi Bharatiya Divas

- Pravasi Bharatiya Divas (PBD) is celebrated once in every two years to strengthen the engagement of the overseas Indian community with the Government of India and reconnect them with their roots.
- It is celebrated on 9 January to mark the contribution of the Overseas Indian community in the development of India. But this time dates were shifted 21st January to allow the guests attending the event to get an opportunity to participate in the 'Kumbh Mela' at Prayagraj and to attend the Republic Day parade.
- January 9 was chosen as the day to celebrate this occasion since it was on this day in 1915 that Mahatma Gandhi returned to India from South Africa.
- During the event, individuals of exceptional merit are honoured with the prestigious Pravasi Bharatiya Samman Award to appreciate their role in India's growth.

Deen Dayal Hastkala Sankul

- The Prime Minister inaugurated Centres of Excellence at Deen Dayal Hastkala Sankul in Varanasi, Uttar Pradesh recently.
- It is a trade facilitation centre for handicrafts.
- The Crafts Museum in the Sankul will preserve the traditional handloom/handicrafts products of Varanasi.
- It aims to facilitate weavers, artisans and exporters in promoting handlooms and handicrafts.

Related Information

- The Finance Minister in the Budget 2014-15 had announced setting up of a Trade Facilitation Centre and a Crafts Museum to develop and promote handlooms, handicrafts and silk products of Varanasi.

Godavari-Cauvery link project

- The Union Minister for Water Resources, River Development and Ganga Rejuvenation announced that the Centre would soon take up a major project to Link Rivers Godavari and Cauvery.

Objectives:

- The project aims to make good use of about 1100 tmc ft of Godavari water that is currently getting drained into the Bay of Bengal.
- The project would take the water from river Godavari to the tail end of Tamil Nadu.
- The government aims to raise finances for the project either from the World Bank or the Asian Development Bank.
- The government aims to address the water deficit being faced and the resulting water dispute among the riparian states of Karnataka, Tamil Nadu, Kerala and Union Territory of Puducherry over sharing of the water from river Cauvery.
- The project would use low thickness steel pipes with a special treatment for linking the Godavari and -Cauvery rather than canals as it results in water loss due to evaporation losses.
- The use of use low thickness steel pipes would also aid in reducing the project costs.

River inter-linking Project

- The Indian Rivers Inter-link is a proposed large-scale civil engineering project that aims to link Indian rivers by a network of reservoirs and canals and so reduce persistent floods in some parts and water shortages in other parts of India.
- The Inter-link project has been split into three parts
 - (1) A northern Himalayan rivers inter-link component
 - (2) A southern Peninsular component and starting 2005
 - (3) An intrastate river linking component.
- The project is being managed by India's National Water Development Agency (NWDA), under its Ministry of Water Resources.
- NWDA has studied and prepared reports on 14 inter-link projects for

the Himalayan component, 16 inter-link projects for Peninsular component and 37 intrastate river linking projects.

- The **Ken-Betwa**, considered as the **first river inter-linking project**, will help irrigate nearly 15 lakh acres of area.

Study on the impact of unplanned development on Ecology of Central Western Ghats

- The Indian Research team undertook a study to examine the possible impact of unplanned development on Ecology of Central Western Ghats.
- The study focussed on River Kali that originates in Uttara Kannada district in Karnataka and joins the Arabian Sea.
- The river has six major dams, 325 species of flora, and 190 species of fauna and the river is as old as the Western Ghats.

Findings of the Study

- Unplanned developmental activities and land use patterns are reducing the evergreen forest cover and perennial streams in the central region of the Western Ghats in India.
- Researchers by studying the remote sensing data found that between the years 1973 and 2016, the forest cover has reduced from 85% to 55%.
- The land use pattern in the region has changed during 1980–2000 period due to developmental projects such as dams built on the river Kali, Kaiga nuclear plant and Dandeli paper mill which has led to large scale destruction of forests.
- As a result, the evergreen forests have shrunk by from 62% to 38.5% during 1980–2000 period and large water reservoirs have been constructed at the expense of forest cover.
- The study citing Perennial streams were found in regions that have greater than 70% of forest cover links ecology and hydrology with land use.

INS Kohassa – a New Bird's Nest in the Andamans

- Naval Air Station Shibpur was commissioned as INS Kohassa.
- NAS Shibpur was identified by NITI Aayog as one of the 'Early Bird' project as part of holistic island development.
- INS Kohassa has been named after a White-Bellied Sea Eagle, which is a large bird of prey, endemic to Andaman and Nicobar Islands.

Related Information

Naval Air Station Shibpur

- It was established in 2001 as a Forward Operating Air Base (FOAB) for enhanced surveillance in North Andaman.
- The close proximity of Coco Islands (Myanmar) and wide expanse of Indian Exclusive Economic Zone (EEZ) makes the base a very vital asset.

BIS in Collaboration with IAF Releases New Standard for Bio-Jet Fuel

- To use bio-jet fuel on all military and civilian aircraft, BIS has in collaboration with IAF, research organisations and the industry brought out a new standard for Aviation Turbine Fuels.
- These specifications will align Indian standards with current international standards.

Related Information

Significances of using Bio-Jet Fuel

- Bio-jet fuel is greenhouse gas (GHG) neutral, carbon neutral, reduces air pollution.
- The use of bio jet fuel will help in reducing greenhouse gas (GHG) emissions by about 15% and sulfur oxides (SOx) emissions by over 99%.
- It is expected to provide indigenous jet fuel supply security.
- Its usage also offers superior engine performance and reduced maintenance cost for the airline operators.

Bureau of Indian Standards (BIS)

- It is the National Standards Body of India working under the aegis of the Ministry of Consumer Affairs, Food & Public Distribution, Government of India.

- It is established by the Bureau of Indian Standards Act, 1986.
- Its headquarters are in New Delhi.
- It also works as WTO-TBT (Technical Barriers to Trade) enquiry point for India.

Successful Flight Test of LRSAM

- Long Range Surface-to-Air Missile (LRSAM) has been successfully testfired from INS Chennai against an incoming aerial target flying at low altitude.

Related Information

Long Range Surface-to-Air Missile (LRSAM)

- It has long-range engagement capability to penetrate deep water and land to intercept all types of aerial targets like subsonic and supersonic missiles, fighter aircraft, maritime patrolling aircraft (MPA), helicopter and sea-skimming missiles.
- It is capable of countering newest generation anti-ship missiles.
- Indian Navy has decided to equip its all naval ships such as INS Kolkata, INS Kochi, and INS Chennai guided missile destroyers with Barak 8 LRSAM for air and missile defence.
- Barak 8 LRSAM has been jointly developed by DRDO and IAI, Israel to be launched from the ship.
- It possesses a high degree of manoeuvrability at target interception range.
- It has a maximum speed of Mach 2 with a maximum operational range of 70 km (which has been increased to 100 km).

18 Indian institutions to study nitrogen pollution

- Eighteen research institutions in India are among a group of 50 institutions called the South Asian Nitrogen Hub (SANH) are selected with the financial assessment given by U.K government to study the impact of Nitrogen pollution,

Related Information

How Nitrogen help in the greenhouse effect?

- Nitrogen is the dominant gas in the atmosphere, it is inert and doesn't react.

- However, when it is released as part of compounds from agriculture, sewage and biological waste, nitrogen is considered “reactive”, and it may be polluting and even exert a potent greenhouse gas (heat trapping) effect.
- Nitrous oxide (N₂O) is 300 times more potent than carbon dioxide but isn’t as prevalent in the atmosphere.
- Other than air pollution, nitrogen is also linked to the loss of biodiversity, the pollution of rivers and seas, ozone depletion, health, economy, and livelihoods.
- Nitrogen pollution is caused by emissions from chemical fertilisers, livestock manure and burning fossil fuels.
- Gases such as ammonia (NH₃) and nitrogen dioxide (NO₂) contribute to poor air quality and can aggravate respiratory and heart conditions, leading to millions of premature deaths across the world.
- Nitrate from chemical fertilisers, manure and industry pollute the rivers and seas, posing a health risk for humans, fish, coral and plant life.

Cabinet decides to strengthen Northeast autonomous councils

- The cabinet approves landmark amendment to Article 280 and Sixth Schedule of the Constitution.
- This amendment will significantly improve the financial and executive powers of the 10 autonomous councils in the Sixth Schedule areas of the northeast.
- The amendment would impact a population of about 1 crore tribals living in Assam, Meghalaya, Tripura and Mizoram, according to the Centre.

Highlights of the proposed amendment

- As per the proposed amendment, at least one-third of the seats would be reserved for women in the village and municipal councils in the Sixth Schedule areas of Assam, Mizoram and Tripura.
- The amendment also provides for the transfer of additional 30 subjects including departments of Public Works, Forests, Public Health

Engineering, Health and Family Welfare, Urban Development and Food and Civil Supply to Karbi Anglong Autonomous Territorial Council and Dima Hasao Autonomous Territorial Council in Assam.

- Amendment in article 280 to mandate the Finance Commission to recommend devolution of financial resources. This will significantly improve the financial resources and powers of the autonomous districts councils.
- Renaming of few existing autonomous councils as the present jurisdiction of these councils extend to more than one districts.
- The proposed amendments provide for elected village municipal councils, ensuring democracy at the grass-roots level.
- Elections to these village and municipal councils will be conducted by the State Election Commission. There will be a provision for anti-defection too.
- At least two nominated members in all autonomous councils will be women.

Sixth Schedule

- The Sixth Schedule of the Constitution deals with the administration of the tribal areas in the four northeastern states of Assam, Meghalaya, Tripura and Mizoram as per article 244.
- The governor is empowered to increase or decrease the areas or change the names of the autonomous districts.
- While executive powers of the Union extend in Scheduled areas with respect to their administration in the 5th schedule, the 6th schedule areas remain within executive authority of the state.
- The acts of Parliament or the state legislature do not apply to autonomous districts and autonomous regions or apply with specified modifications and exceptions.
- The Councils have also been endowed with wide civil and criminal judicial powers, for example establishing village courts etc. However, the

jurisdiction of these councils is subject to the jurisdiction of the concerned High Court.

Global Talent Competitive Index-2019

- India secured 80th rank in the Global Talent Competitive Index 2019.

Related Information

Global Talent Competitive Index

- This Index helps to measure the ability of countries to compete for talent.
- It is released by INSEAD business school in partnership with Tata Communications and Adecco Group.
- Its theme is "**Entrepreneurial Talent & Global Competitiveness**".
- This Index takes into account variables such as ease of hiring, gender earnings gap, and the prevalence of training in firms.

India's Context

- India's biggest challenge is to improve its ability to attract and retain talent.
- India needs to address its poor level of Internal Openness in particular with respect to weak gender equality and low tolerances towards minorities and immigrant.

Indian Africa Field Training Exercise IAFTX 2019

- Indian Africa Field Training Exercise (IAFTX)-2019 was held in Pune.

Related Information

IAFTX

- It is a joint training exercise between more than a dozen African countries & India.
- The IAFTX-2019 is a positive step towards growing political and military ties with the member nations of the African continent and will boost the already strong strategic cooperation between the countries.

Pravasi Teerth Darshan Yojana

- Prime Minister launched Pravasi Teerth Darshan Yojana in New Delhi.
- Under this scheme, a group of Indian origin currently in different nations will be taken to all religious places in India twice a year.

Eligibility criteria for the scheme

- The person should be Indian origin and aged between 45 to 65.

- The group will be selected out of them with first preference given to people from 'Girmitiya Countries' such as Mauritius, Fiji, Suriname, Guyana, Trinidad and Tobago and Jamaica.
- Religious places of all major religions in India are included in the scheme and Government will bear all the expenses including the airfare from their country of residence.

World's lightest satellite 'Kalamsat-V2'

- In its first mission of 2019, the ISRO successfully launched a students' satellite Kalamsat and an imaging satellite Microsat-R from the Satish Dhawan Space Centre in Sriharikota, Andhra Pradesh.
- This is also the 46th flight of ISRO's workhorse PSLV.

Kalamsat

- It is a payload developed by students and Chennai based Space Kidz India for the first time.
- The Microsat-R satellite is meant for the Defence Research and Development Organisation (DRDO) purposes.
- The Kalamsat is the first to use the rocket's fourth stage as an orbital platform.
- ISRO is using the aluminium tank for the first time in the fourth stage of the launch of PSLV C 44. This is to reduce the weight and increase the mass in the four-stage engine expendable rocket with alternating solid and liquid fuel.

Related Information

- In its last mission, on November 29, 2018, ISRO successfully injected India's earth observation satellite HysIS onboard PSLV C43 into its designated orbit.

Jumbos to patrol Odisha's Satkosia Tiger Reserve

- Patrolling in the Satkosia Tiger Reserve is set to be strengthened as two trained elephants would be deployed there shortly.
- The two elephants are being brought from the Similipal Tiger Reserve.

Related Information

Satkosia Tiger Reserve

- It is a tiger reserve located in the Angul district of Odisha.
- It is located where the Mahanadi River passes through a 22 km long gorge in the Eastern Ghats mountains.
- The tiger reserve is located in the Eastern Highlands moist deciduous forests ecoregion.
- Saktosia Tiger Reserve was designated in 2007 and comprises the Satkosia Gorge Wildlife Sanctuary and the adjacent Baisipalli Wildlife Sanctuary.

Ministry of Defence Launches 'RDP INDIA 2019'

- Ministry of Defence had launched a mobile app 'RDP India 2019' on the Republic Day as a new initiative in sync with the Digital India campaign of the Government.
- It helps to the intent of making available the highlights of the Republic Day event, not only to the spectators at Rajpath but also to the general public all over the world.
- This app contains information about the Parade on Rajpath, New Delhi, including Order of the March, details of the tableaux presented by different States and Ministries, children cultural performances, fly past and names of recipients of Pradhan Mantri Rashtriya Bal Puraskar 2019.
- It was extremely informative to the spectators witnessing the Parade and was widely appreciated.
- The app also had the provision for live streaming of the Parade.

President of India Graces National Voters' Day Celebrations

- The President of India graced and addressed the 9th National Voters' Day celebrations in New Delhi on 25 January.
- The theme of Voters' Day 2019 is, **No voter to be left behind.**
- The day is to mark the Foundation day of the Election Commission of India, which was established on 25th January 1950.

Pravasi Dividend Pension Scheme

- The government of Kerala has launched 'Pravasi Dividend Pension Scheme.

Related Information About the Scheme

- The scheme has been introduced by the government of Kerala as part of welfare measures towards Pravasi Malayalis.
- Under the scheme, a regular pension would be provided to Non-Resident Keralites on a one-time payment of Rs 5 lakh.
- This onetime payment would be deposited with KIIFB (Kerala Infrastructure Investment Fund Board) for financing infrastructure projects.
- The government had initiated Loka Kerala Sabha (LKS) with the aim of using the expertise, talent, and resources of NRIs from Kerala for the overall growth and development of the state.

India celebrates 70th Republic Day

- Republic day in India is celebrated every year on 26th of January to honor the Constitution of India as it came into force on the 26 January 1950.
- **The theme of this republic day is:** 'life of Gandhi' which is a tribute to the father of the nation Mahatma Gandhi on his 150th birth anniversary.
- President Cyril Ramaphosa, President of the Republic of South Africa is the Chief Guest of this 70th Republic day.
- This is the second time a South African leader is Chief Guest at Republic Day — Nelson Mandela was the chief guest in 1995.

Unique about this Republic day.

- The 70th Republic Day parade had the highest number of women officers participating in the celebrations with Lt. Bhavana Kasturi leading a contingent of 144 male personnel.
- This is the first time in the history of Indian Army that a woman had led the Army services corps.
- An all-women contingent of Assam Rifles, India's oldest paramilitary force had participated for the first time.
- The weapons which showcased for the first time in a Republic day parade are M777 and K-9 Vajra ultra-light howitzers along with the Medium-

Range Surface-to-Air Missile (MRSAM) missile of the DRDO.

- 'Sankhnaad', a martial tune created for the Indian armed forces, played for the first time on the 70th Republic Day parade.
- Since Independence, the Indian defence forces have been playing 'martial tune' created by the Britishers. 'Sankhnaad' is based on Indian classical music.

Related Information

- The Constitution came into effect on January 26, 1950, a date specially chosen to coincide with the anniversary of 'Purna Swaraj Diwas'.
- January 26, 1930, was marked as 'Purna Swaraj Diwas', or the day the nation would attain complete freedom from its colonizers by the Congress.

Pranab Mukherjee, Nanaji Deshmukh, and Bhupen Hazarika awarded Bharat Ratna

- President of India conferred the Bharat Ratna, the nation's highest civilian honor, to former President Pranab Mukherjee, along with social activist Nanaji Deshmukh (posthumous) & Assamese musician Bhupen Hazarika (posthumous).

Bharat Ratna

- Bharat Ratna is the highest civilian award of the Republic of India.
- The provision of Bharat Ratna was introduced in 1954.
- There is no written provision that Bharat Ratna should be awarded to Indian citizens only.
- It is awarded in recognition of exceptional service/performance of the highest order in any field of human endeavor.
- The award was originally limited to achievements in the arts, literature, science and public services but the government expanded the criteria to include "any field of human endeavor" in December 2011.

Note:

(a) Article 18 (1) of the Constitution said that 'the award cannot be used as a prefix or suffix to the recipient's name.

(b) However, should an award winner consider it necessary, he/she may use the expression in their biodata/letterhead/visiting card etc. to indicate that he/she is a recipient of the award.

"Yuva Swabhiman Yojana" for urban youth

- Madhya Pradesh government launched 'Yuva Swabhiman Yojana' for youths of the weaker section in urban areas of Madhya Pradesh

About the scheme

- The scheme was launched in Chhindwara Madhya Pradesh.
- It aims to provide employment to the youth belonging to the weaker section of the society mainly in urban areas of the state.
- 100 days of employment will be provided under this scheme.

Crocodylus palustris, a crocodile species that is being removed from the Narmada

- The mugger crocodile also called marsh crocodile or broad-snouted crocodile is a species (*Crocodylus palustris*) native to freshwater habitats from southern Iran and Pakistan to the Indian subcontinent and Sri Lanka.
- Gujarat Forest Department has started evacuating muggers from two ponds on the Sardar Sarovar Dam premises on the Narmada, to facilitate a seaplane service at the Statue of Unity.
- Already extinct in Bhutan and Myanmar, the mugger has been listed as vulnerable on the IUCN Red List since 1982.
- In India, it is protected under Schedule I of the Wildlife Protection Act, 1972.
- Among the six schedules in the Act, Schedule I and part II of Schedule II provide the highest degrees of protection to listed species, with the most stringent penalties for offenders. So its relocation or capture is definitely illegal without permission.

Habitats

- Vadodara, 90 km from the Narmada dam, is the only city in the country where crocodiles live in their natural habitat amidst human population.

- Crocodiles from the Vishwamitri river, where they number around 300, often enter people's homes, giving rise to conflict and capture.
- Most of these crocodiles are thereafter released in the Narmada dam waters, away from human habitats.

Importance of crocodiles

- Crocodiles are valued for their skin & flesh.
- In some cases, they are also worshipped, including in the Narmada. In idols of the Narmada Goddess, a crocodile is her vehicle; there is an idol on the premises of the Narmada Dam.
- Goddess Khodiyar Maa, who is worshipped by a section of Gujaratis, is also seen riding a crocodile as a symbol of her supremacy over land and water.

Indian Railways' fastest "Train 18" named "Vande Bharat Express"

- India's first indigenously built engineless semi-high speed train, Train 18, has been named Vande Bharat Express.
- The train is set to run between Delhi & Varanasi at a maximum speed of 160 kmph.
- The 16-coach train, built in 18 months at a cost of Rs 97 crore by the Modern Coach Factory, Rae Bareilly.
- It's also the first locomotive-less train in the country.
- It is a fully air-conditioned train.

Odisha govt launched "DAMaN" initiative to control malaria

- Odisha Government had launched a malaria control programme – "Durgama Anchalare Malaria Nirakaran (DAMaN)" initiative.
- This programme involves mass screening for malaria with the treatment of positive cases along with intensified surveillance, mosquito control measures and regular health education activities throughout the year.
- District Health Information System 2 (DHIS2), open-source web-based surveillance for malaria is used for mass screening and treatment of patients in inaccessible areas.

Status of Odisha in Malaria

- Odisha, which accounts for over 40% per cent malaria burden of the entire country, has reported about a 85% decline in average monthly malaria cases in the State.

Related Information

Malaria

- It is caused by the protozoan parasite Plasmodium.
- Malaria is typically found in tropical and subtropical climates where the parasites can live.
- According to The World Health Organization's **World Malaria Report of 2018**

(a) India is the only country among the 11 highest-burden countries that saw substantial progress in reducing disease burden.

(b) India had pledged to eliminate the disease by 2030 at the East Asia Summit, 2015.

(c) India has launched the five-year National Strategic Plan for Malaria Elimination (NSPME) (2017-2022) which focused on malaria "control" to "elimination".

(d) NSPME includes the target of ending malaria in 571 districts out of India's 678 districts by 2022.

National Chilika Bird Festival

- The second National Chilika Bird Festival started at Mangalajodi in Chilika.
- The festival is organised to promote eco-tourism and preservation of birds in Odisha.
- It is jointly organized by Odisha Tourism and Chilika Development Authority.
- The National Chilika Bird Festival Award was awarded to Mangalajodi Ecotourism Group for their active involvement in bird protection.

Chilika Lake

- Chilika lake, located in the coastal Odisha is Asia's largest brackish water lagoon.
- Chilika Lake with its rich bio-diversity and socio-economic importance has been a designated Ramsar site (a

wetland of international importance) since 1981.

- It lies in the Central Asian Flyway for birds, is a major stopover for migratory birds from the Arctic and the Sub-Arctic regions in the course of their onward and return migration along the east coast.

Odisha govt launched Project "Jiban Sampark"

- Odisha has launched Jiban Sampark project for the welfare of the Particularly Vulnerable Tribal Groups (PVTG).

Jiban Sampark Project

- The Project is being undertaken in association with UNICEF.
- It aims to generate awareness among PVTGs in Odisha on various development and welfare initiatives of State Government, especially on women and child welfare.
- The focus areas of the Project are skill development, empowering communities, cooperation and innovation among the tribal groups.

Particularly Vulnerable Tribal Groups (PVTGs)

- The PVTGs are the marginalized section of the Scheduled tribes of India.
- This section who are relatively isolated, educationally and socio-economically backwards, living in a habitat far away from amenities.
- PVTG is not a Constitutional category, nor are these constitutionally recognized communities.
- It is a government of India classification, created with the purpose of enabling improvement in the conditions of certain communities with, particularly low development.
- The criteria followed for determination of PVTGs are as under:
 - (a) A pre-agriculture level of technology
 - (b) A stagnant or declining population
 - (c) Extremely low literacy
 - (d) A subsistence level of the economy

Zearalenone Toxin

- Zearalenone is a fungal toxin infesting cereals such as wheat, maize and barley.
- The recent numerous studies detected zearalenone in wheat, rice, corn and oats from markets in Uttar Pradesh.
- It attacks crops while they are growing, but can also develop when cereals are stored without being dried fully.

What is the issue?

- Fungal toxins are commonly found in food and can be a public health concern.
- India regulates the levels of some of these, including aflatoxin, deoxynivalenol, ergot and patulin.
- The first three infest cereals, while patulin is found in apples.
- Each of these toxins has been associated with disease outbreaks.
- Chronic aflatoxin consumption has been shown to cause liver cancer.
- The International Agency for Research on Cancer (IARC) classifies aflatoxin as a Group 1 carcinogen, meaning there is enough evidence for its carcinogenicity.

Non-communicable diseases top killers in South-East Asia: WHO

- According to WHO, Non-communicable diseases (NCDs)-mainly cardiovascular diseases, chronic respiratory diseases, diabetes and cancer — continue to be the top killers in the South-East Asia Region.

Outcomes of the Report

- The four 'major' NCDs are caused, to a large extent, by four modifiable behavioural risk factors:
 - (a) tobacco use
 - (b) unhealthy diet
 - (c) insufficient physical activity
 - (d) harmful use of alcohol
- Non-communicable diseases such as diabetes, cancer and heart disease, are collectively responsible for over 70% of all deaths worldwide, or 41 million people.
- These include 15 million people dying prematurely, aged between 30 & 69.

How this can be reduced?

- A study conducted worldwide has noted that consuming fibre and whole

grains can reduce health risks from non-communicable diseases such as heart disease.

- The eating fibre-rich foods reduce the incidence of coronary heart disease, stroke, type 2 diabetes and colorectal cancer by 16% to 24%.
- Higher fibre intake is also associated with lower body weight, systolic blood pressure and total cholesterol when compared with lower intake.

Project Cosmic Microwave Background (CMB)-Bharat

- The scientific space project CMB-Bharat has been presented as a proposal to the ISRO.
- The project is developed by the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune.
- The project is expected to reveal the first clear sign of quantum gravity and ultrahigh energy physics in the very early universe.
- It proposes near-ultimate survey polarisation that would exhaust the primordial information in the Goldmine for cosmology.
- The project aims to map all dark matter and most baryons in the observable universe.

Atal Setu of Goa

- Goa Chief Minister inaugurated the "Atal Setu" on the Mandovi river in Goa.
- It is a four-lane 5.1-km long cable-stayed bridge connects state capital Panaji with north Goa.

Related Information

Mandovi River

- Mandovi, also known as the Mahadayi river is regarded as the lifeline of Goa.
- The river originates from Bhimgad in the Western Ghats in the Belagavi district of Karnataka.
- The catchment area in Goa, Karnataka and Maharashtra respectively.
- Owing to the differences over the sharing of the river water among the states of Goa, Karnataka and Maharashtra, the union government has constituted Mahadayi Water Disputes Tribunal to examine the claims made by the states.

J&K Governor grants quota for J&K's Pahari community

- Governor of Jammu and Kashmir has given his approval for the Kashmir Reservation (Amendment) Bill, 2014, providing reservation to the persons belonging to Pahari community of the State.
- The legislation is aimed at providing job opportunities to the Pahari people residing in backward areas of the State.

Pahari Community

- Pahari is a linguistic group, comprising both Muslims and Hindus, and is mainly located in Poonch, Rajouri, Kupwara and Baramulla districts.
- Because of the remoteness and inaccessibility of the areas of their residence, the Pahari community has historically faced considerable economic distress leading to overall socio-economic backwardness.

Kondaveedu Buddhist remains date back to Satavahana period

- The Department of Archaeology and Museums has found Buddhist remains under the 'garbhagriha' (sanctum sanctorum) of Sivalayam at Kondaveedu fort (Guntur, Andhra Pradesh).
- The remains date back to later Satavahana period--1st to 2nd century A.D.

Former Finance Commission chairman Vijay Kelkar pitches for setting up 'Niti Aayog 2.0'

- Former Finance Commission chairman Vijay Kelkar has pitched for setting up of a 'new Niti Aayog' or Niti Aayog 2.0.
- Socialist-era Planning Commission was replaced by think-tank Niti Aayog on January 1, 2015, by the Modi government.

Why does India need Niti Aayog 2.0?

- Kelkar, in a paper titled 'Towards India's New Fiscal Federalism', argued that replacing the Planning Commission by the Niti Aayog, a think tank, has reduced the government's policy reach.
- It is desirable that a functionally distinct entity such as the new Niti Aayog or Niti Aayog 2.0 be put to use

to do the job at hand related to the structural issues including removal of regional imbalances in the economy.

- The Niti Aayog 2.0 will be responsible for allocating development or transformational capital or revenue grants to the states.
- In order to make the new Niti Aayog more effective, it is essential to ensure that the institution is at the 'High Table' of decision making of the government. This means the vice-chairman of the new Niti Aayog will need to be a permanent invitee of the Cabinet Committee on Economic Affairs (CCEA).
- The new Niti Aayog need not be involved with the approval of the state's annual expenditure programmes. It should rather strive to be a think-tank with 'praxis' possessing considerable financial muscle and devote its energies to outline coherent medium- and long-term strategy and corresponding investment resources for transforming India," he suggested.

First Swadesh Darshan project in Sikkim

- Union Minister for Tourism inaugurated the first Swadesh Darshan project in Sikkim.
- The project "Development of North East Circuit: Rangpo- Rorathang-Aritar- Phadamchen- Nathang-Sherathang- Tsongmo- Gangtok- Phodong- Mangan- Lachung-Yumthang- Lachen- Thangu-Gurudongmer- Mangan- Gangtok-Tuminlingee- Singtam" implemented under Swadesh Darshan Scheme of Ministry of Tourism, Government of India.

Related Information

Swadesh Darshan Scheme

- Launched by the Ministry of Tourism.
- Launched in 2014-15.
- For the integrated development of theme-based tourist circuits in the country.
- It also has a provision for voluntary funding under Corporate Social Responsibility (CSR).

- The scheme has identified 13 thematic circuits for development:

1. Buddhist Circuit
2. North-East India Circuit
3. Coastal Circuit
4. Himalayan Circuit
5. Krishna Circuit
6. Desert Circuit
7. Eco Circuit
8. Wildlife Circuit
9. Tribal Circuit
10. Rural Circuit
11. Spiritual Circuit
12. Ramayana Circuit
13. Heritage Circuit

Success for golden langur breeding project in Assam

- Assam Environment and Forest Minister announced the success of the Golden Langur Conservation Breeding Programme in the State.
- The golden langur conservation project was undertaken at the Assam State Zoo in Guwahati during the 2011-12 fiscal which is funded by the Central Zoo Authority.

Related Information

Golden langur

- It is an Old-World monkey found in a small region of western Assam, India and in the neighbouring foothills of the Black Mountains of Bhutan.
- It is one of the most endangered primate species in India.
- Its IUCN status is endangered.

ICAR launches National Agricultural Higher Education Project (NAHEP)

- ICAR has launched an ambitious National Agricultural Higher Education Project (NAHEP).
- This project will be funded by the World Bank and the Indian Government on a 50:50 basis.
- The aim of the project to attract talent and strengthen higher agricultural education in the country.

Related Information

- Student READY (Rural Entrepreneurship Awareness Development Yojana) scheme is being run in order to promote the participation of students in agricultural business.

- Under the scheme, practical experience of agriculture and entrepreneurship is provided to undergraduate students.
- Recently, the second Indian Agricultural Research Institute (IARI) of the country was -also established in Barahi, Jharkhand.

Jewellery gets a 'council'

- The Commerce Ministry announced the formation of a **Domestic Council for Gems & Jewellery**.
- It will help to bring the industry's domestic business stakeholders under one umbrella so that they could evolve a unified approach to promote growth in the sector.
- This Council will help in tapping new opportunities in the already existing large domestic market.
- The first priority of the Domestic Council should be to uplift the living standards of artisans.

Indian students to participate in PISA 2021

- The HRD Ministry signed a pact with the Organisation for Economic Cooperation and Development (OECD) for the participation in Programme for International Student Assessment- PISA 2021.
- PISA-2021 is a competency-based test, which tests the learning levels of 15-year-old students in reading, mathematics and science.
- With the signing of the pact, Indian students aged 15 will be able to take the Programme for International Student Assessment or PISA, which is conducted every three years.

India's participation in PISA

- Schools run by Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS) and schools in the UT of Chandigarh will participate.
- Within the country, PISA covers a sample of 15-year-old students representing all forms of schooling i.e. public, private, private aided etc.
- PISA is a competency-based assessment which unlike content-based assessment, measures the extent to which students have acquired key competencies that are

essential for full participation in modern societies.

- It would lead to recognition and acceptability of Indian students and prepare them for the global economy in the 21st century.
- India had taken part in Programme for International Student Assessment (PISA) in 2009 and bagged the 72nd rank among 74 participating countries.
- Then UPA government had boycotted PISA, blaming "out of context" questions for India's dismal performance.

What are the key features of PISA?

- PISA is a triennial international survey (every three years) which aims to evaluate the education system worldwide by testing the skills and knowledge of 15-year-old students.
- Students are assessed in reading, mathematics, science and collaborative problem-solving.
- Participation in PISA allows benchmarking performance against a wide range of countries.

Tata veterans join hands with Quantum for \$1Bn ESG fund

- Three former Tata Group executives in partnership with Quantum Advisors will launch a \$1 billion Environment, Social and Governance (ESG) Fund.

About the Fund

- The fund will invest mainly in listed mid-cap companies that are doing well on the environment, social and governance (ESG).
- The proposed equal joint venture (JV) would mobilise funds from long-term foreign investors such as pension funds, sovereign wealth funds and family offices of high net-worth individuals (HNIs) who value ESG.
- The fund will aim to drive higher ESG performance in Indian corporates and it will adopt an engaged, private equity approach to public markets investing, with a focus on working with companies willing to recognize the long-term advantages of actively adopting ESG standards of excellence.

Ganga Expressway: World's longest expressway

- The government of Uttar Pradesh has approved the construction of the Ganga Expressway.

About the Expressway

- The expressway will provide for better connectivity of the Prayagraj (Allahabad) to Western Pradesh.
- National Expressways Authority of India under the Ministry of Road Transport and Highways is responsible for the construction and maintenance of expressways.
- The expressway starting from Meerut will pass through Amroha, Bulandshahr, Badaun, Shahjahanpur, Farrukhabad, Hardoi, Kannauj, Unnao, Rae Bareilly, Pratapgarh before reaching Prayagraj.

New Delhi superbug gene reaches the Arctic

- Recently the Scientists have found a superbug gene 'blaNDM-1' in the Arctic region.
- blaNDM-1 stands for 'New Delhi Metallo-beta-lactamase-1'.
- It was first detected in New Delhi over a decade back.
- Soil samples taken in Svalbard region have confirmed the spread of blaNDM-1 into the High Arctic.
- Svalbard region is located in a Norwegian archipelago between mainland Norway and the North Pole.
- This Antibiotic-Resistant Gene (ARG) is originally found in Indian clinical settings.
- The superbug provides multi-drug resistance (MDR) in microorganisms.

India replaced Japan as second top steel producer

- India has replaced Japan as the world's second-largest steel producing country, while China is the largest producer of crude steel accounting for more than 51 Percent of production.
- It was stated by the World Steel Association (worldsteel) in its latest report.

- The global steel body in its latest report noted that China's crude steel output jumped 6.6 Percent to 928.3 million tonnes (MT) in 2018 from 870.9 MT in 2017.
- India's crude steel production in 2018 was at 106.5 MT, up by 4.9 Percent from 101.5 MT in 2017.
- Japan produced 104.3 MT in 2018, down 0.3 per cent compared to 2017.
- The United States is at the 4th position as the country produced 86.7 MT of crude steel in 2018.

Related Information

World Steel Association

- It is one of the industry associations in the world.
- Its members represent around 85 Percent of the world's steel production, including over 160 steel producers with 9 of the 10 largest steel companies, national and regional steel industry associations, and steel research institutes.
- It is a non-profit organisation with its headquarters in Brussels, Belgium.

The IEA's Report - "The Future of Rail"

- Ministry of Railways & Coal launched "The Future of Rail" report of International Energy Agency (IEA).

About the Report

- It is the first-of-a-kind report analyses the current and future importance of rail around the world through the perspective of its energy and environmental implications.
- The report reviews the impact of existing plans and regulations on the future of rail and explores the key policies that could help to realise an enhanced future rail.
- The report has a focus on India, elaborating on the unique social and economic role of rail in India, together with its great enduring potential, to show how India can extend and update its networks to harness rail at a scope and scale that is unparalleled.

International Energy Agency

- It is an inter-governmental organisation that works to ensure reliable, affordable and clean energy for its 30-member countries and 8 association countries.

- Its secretariat is in Paris.
- 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.
- Its mission is guided by four main areas of focus:
 - Energy security
 - Economic development
 - Environmental awareness
 - Engagement worldwide.

Note: India has been the focus of many recent IEA analyses and reports for instance through the special focus chapter on the Indian Power sector of the Energy Technology Perspectives (ETP) publication and the World Energy Outlook (WEO).

Inosine-5'-monophosphate dehydrogenase (IMPDH): new compound to fight stomach infections

- Scientists at the IIT, Gandhinagar have synthesized a new compound "IMPDH" that may help treat stomach infections caused by common bacteria, Helicobacter pylori.
- The inhibitor is based on an aromatic chemical compound, indole.
- It may help in treating H. pylori infection which is a cause for gastritis, peptic ulcers and stomach cancers.

Related Information

- For the study, scientists isolated IMPDH gene from H. Pylori and express edits protein.
- The study also showed that the inhibitor specifically targets the Inosine-5'-monophosphate dehydrogenase protein of the bacterium and not humans making it safe for human use.
- It is estimated that about of half of the global population may be infected with H. pylori.
- While the symptoms of this infection mostly go unnoticed, it is a cause of diseases like gastritis and ulcers.
- In India, the burden of this infection is almost 80% in rural areas due to poor hygiene and healthcare facilities.
- Currently, the infection is treated either with clarithromycin-based therapy or by a mix of this therapy and antibiotics.

Corruption Perceptions Index 2018

- The 2018 Corruption Perceptions Index (CPI) released by Transparency International.
- It reveals that the continued failure of most countries to significantly control corruption is contributing to a crisis of democracy around the world.
- More than two-thirds of countries score below 50, with an average score of only 43.
- Denmark and New Zealand top the Index with 88 and 87 points, respectively.
- Somalia, South Sudan, and Syria are at the bottom of the index, with 10, 13 and 13 points, respectively.
- The highest scoring region is Western Europe and the European Union, with an average score of 66, while the lowest scoring regions are Sub-Saharan Africa (average score 32) and Eastern Europe and Central Asia (average score 35).

India Position

- India has been ranked at 78th place out of 180 countries in 'Corruption Perception Index' (CPI) released by Transparency International in 2018 against 81st in the Year 2017.
- India marginally improved its score to 41 (from 40 in 2017).

About Index

- The index ranks the countries by their perceived levels of public sector corruption according to experts and business people.
- It uses a scale of 0 to 100, where 0 is highly corrupt and 100 is very clean.

ISRO sets up Human Space Flight Centre in Bengaluru for manned

- ISRO unveiled its Human Space Flight Centre in Bangalore where astronauts get their training.

Related Information

Human Space Flight Centre (HSFC)

- HSFC shall be responsible for implementation of Gaganyaan project which involves end-to-end mission planning, development of engineering systems for crew survival in space, crew selection and training and also

pursue activities for sustained human space flight missions.

- It will take the support of existing ISRO centres to implement the first development flight of Gaganyaan under the human spaceflight programme.
- The space agency is gearing up for the human spaceflight programme by 2021-end that is likely to include a woman astronaut.
- The plan is to have the first unmanned mission in December 2020 and second for July 2021.

DDA to launch an online portal for land pooling policy on Feb 5

- The Delhi Development Authority (DDA) will launch an online portal for the land pooling policy.

Land Pooling Policy

- The policy will cover "urbanisable areas of urban extensions in 95 villages.
- Under the policy, the Floor Area Ratio (FAR) has been reduced to 200 as opposed to initially proposed FAR of 400.
- A landowner must have at least two hectares of land to be eligible to participate in the policy, which aims to accommodate 76 lakh people.
- The urban body will act as a "facilitator and planner" under the policy and transfer of land to the DDA.

Aber: Digital currency

- Aber is a digital currency which is recently launched by the central banks of the UAE and Saudi Arabia.
- It will be used for financial settlements between the two countries through Blockchains and Distributed Ledgers technologies.
- Digital Currency is part of the efforts to adopt new technologies like Blockchain, Artificial Intelligence, Internet of Things, in line with the Fourth Industrial Revolution that is reshaping governments and corporations around the world.

Africa Centre for Climate and Sustainable Development

- The Africa Centre for Climate and Sustainable Development was

inaugurated by the Italian Prime Minister at Rome.

- The centre has been opened by the Italian government in association with the United Nations Development Programme (UNDP) and the Food and Agricultural Organisation (FAO).

Related Information

About the Centre

- The centre's origin can be traced to a declaration endorsed by the G7 meeting of the Environment Ministers in 2017.
- The centre would facilitate coordination among the G7 and African countries on common initiatives in Africa to achieve the goals set by the Paris Agreement and the 2030 Agenda.
- It will provide a fast-track, demand driven mechanism for African countries to access grant resources that support policies, initiatives, and best practices on climate change, food security, access to water, clean energy.
- And also accelerating progress on the Sustainable Development Goals (SDGs) in Africa.

Implementation Models under the Pradhan Mantri Jan Arogya Yojana

- The Pradhan Mantri Jan Arogya Yojana (PM JAY) proposes three models through which the states can implement the scheme.

These are:

1. **Insurance Model:** Under this Model, the premiums are paid to the insurance company, which administers and pays the claim.
2. **Trust-based model:** Under this Model, each State forms its own trust to manage the scheme and claims will be disbursed from a corpus created from central and State government contributions.
3. **Hybrid model:** Under this Model, a part of the claim comes under the insurance model while the balance gets processed under the trust.

Related Information

About Pradhan Mantri Jan Arogya Yojana

- PMJAY is a scheme of the government under Ayushman Bharat which aims to reduce the financial burden on poor and vulnerable groups arising out of the catastrophic hospital.
- Under the PM-JAY scheme, about 10.74 crores poor, deprived rural families and identified occupational categories of urban workers' families as per the latest Socio-Economic

Caste Census (SECC) data will have health benefits cover of Rs Five Lakhs per family per year at free of cost.

- PM-JAY seeks to accelerate India's progress towards the achievement of Universal Health Coverage (UHC) and Sustainable Development Goal 3 which calls for ensuring healthy lives and promote well-being for all at all age.

UPSC & State PCS Exams

IAS, UPPSC, RAS, BPSC, MPPSC