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ART & CULTURE

- **UNESCO Lists Wrestling, Reggae And Raiho-Shin Rituals Under "Intangible Heritage"**

The newly added ones are (seven in number):7

- From the border between Asia and Europe, in Georgia, it added **Chidaoba**, which combines elements of wrestling, music, dance and special garments. The practice encourages a healthy lifestyle and plays an important role in intercultural dialogue.
- **Hurling,** from Ireland, also made the grade. This field game, which dates back 2,000 years, features strongly in Irish mythology. Played by two teams using a wooden "hurley" stick and a small "sliotar" ball. hurling is considered as an intrinsic part of Irish culture and plays a central role in promoting health and wellbeing, inclusiveness and team spirit
- **Jamaican reggae was also inscribed**. Originating from marginalized groups, mainly in Western Kingston**,** the genre's "contribution to international discourse on issues of injustice, resistance, love and humanity underscores the dynamics of the element as being at once cerebral, socio-political, sensual and spiritual.
- **Japan's Raiho-shin rituals**, **used to admonish laziness and teach children good behavior**, was another winner. Stemming from folk beliefs that deities visit communities and usher in the New Year or season, local people dress in outlandish costumes and visit houses as deities.
- Practiced across many areas of **Jordan, As-Samer**, another new inscription, consists mainly of dancing and singing. **poetry forms an integral part** of the tradition, "expressing feelings of joy, peace, intimacy and empathy" among those in attendance.
- Marking the end of the old and beginning of a new annual horse-breeding cycle, the **spring festive rites of Kazakh horse breeders were also inscribed.**
- An historic joint bid was made by both Koreas, to include **traditional Korean wrestling known as ssirum/ssireum,** is fundamentally linked to land and agriculture.It has also been inscribed**.**

- **First Ever Swadesh Darshan Project In The State Of Nagaland Inaugurated.**

- The project "Development of Tribal Circuit: **Peren-Kohima-Wokha**" was sanctioned by the **Ministry of Tourism** in November 2015.
- **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 prioritised manner. Under this scheme the Government is focussing on development of quality infrastructure in the country with objective of providing better experience and facilities to the visitors on one hand and on other hand fostering the economic growth.
- Under the Swadesh Darshan scheme, **13 thematic circuits** have been identified, for development namely: **North-East India Circuit, Buddhist Circuit, Himalayan Circuit, Coastal Circuit, Krishna Circuit, Desert Circuit, Tribal Circuit, Eco Circuit, Wildlife Circuit, Rural Circuit, Spiritual Circuit, Ramayana Circuit and Heritage Circuit**

- **Pak. Plans Heritage Park For Hindus, Buddhists**

- The **Khyber Pakthunkhwa province** plans to construct a heritage park in **Elum Valley**, which carries a historical significance to both the Hindus and the Buddhists, to promote religious tourism.

- **Elum Valley is located between the Swat and Buner districts** in the province, Elum Valley has been a site of divinity and pilgrimage for both the Hindu and the Buddhist communities.
- **According to Hindu belief, Lord Ram spent time meditating there during his 14 years of exile**, while Buddhists believe it to be the site where a previous incarnation of Lord Buddha(Bodhisattvas) gave up his life.

➢ **PM To Open Buddhist Site Museum At Lalitgiri In Odisha**

- One of the earliest **Buddhist settlements in Odisha, Lalitgiri**, where excavations have yielded ancient seals and inscriptions, has been converted into a museum.
- Located in **Cuttack district**, it will be the **third site museum of the Bhubaneswar circle** of **the Archaeological Survey of India after Ratnagiri and Konark**.
- **Together with the Lalitgiri and Udayagiri sites, Ratnagiri is part of Puspagiri University located on top of hills of the same names. The three complexes are known as the "Diamond Triangle"*.***
- Excavations at **Lalitgiri** have yielded the remains of four monasteries, showing cultural continuity from the **post-Mauryan period till the 13th century CE**. The centre of attraction is a relic casket containing corporal remains found inside the **Mahastupta.**
- The most important finding of the Lalitgiri are relic caskets found inside the *stupa* during excavations in the year 1985. **Three Khondalite stone caskets were found out of which two have one set of steatite, silver and gold caskets each with the relics inside in the form of charred bones.**

➢ **PM To Release The Commemorative Coin And Postage Stamp In Memory Of Paika Rebellion**

- **Two-hundred years ago in 1817**, a valiant uprising of soldiers led by **Buxi Jagabandhu (Bidyadhar Mohapatra)** took place in Khurda of Odisha. This is known as Paika rebellion.
- **The Paikas were the traditional land-owning militia of Odisha** and served as warriors. When armies of the East India Company overran most of Odisha in 1803, the **Raja of Khurda** lost his primacy and the power and prestige of the Paikas went on a decline.
- **The British were not comfortable with these aggressive, warlike new subjects and set up a commission under Walter Ewer to look into the issue**.
- The commission recommended that the hereditary rent-free lands granted to the Paikas be taken over by the British administration and this recommendation was zealously adhered to. They revolted against the British.

➢ **Issue Of Commemorative Postage Stamp On Rajkumar Shukla**

- In drawing the **attention of Mahatma Gandhi** to the plight of peasants suffering under an oppressive system established by **European indigo planters** in **Champaran, Bihar, Rajkumar Shukla** made a **seminal contribution culminating in the launch of the Champaran Satyagraha in 1917 by Mahatma Gandhi ji.**
- Department of Posts has been paying a tribute to eminent personalities who have made a significant contribution to public life especially freedom fighters.

➢ **MoU Signed To Develop A Mobile Audio Guide App For Five Iconic Sites**

- A Memorandum of Understanding under the **'Adopt a Heritage'** project to M/s Resbird Technologies for development of a mobile Audio Guide App for five iconic sites has been signed.
- **The five iconic site**s for which the mobile Audio Guide App is to be developed **are Amer Fort (Rajasthan), Kaziranga (Assam), Colva Beach (Goa), Kumarakom (Kerala) and Mahabodhi Temple (Bihar).**
- These agencies would become **'Monument Mitras'** through the innovative concept of **'Vision Bidding'**, which will give them the opportunity to associate their CSR activities with a heritage site if the Vision Bid is selected**.**
- **The "Adopt a Heritage: Apni Dharohar, Apni Pehchaan" project is a collaborative effort between the Ministry of Tourism, Ministry of Culture and Archaeological Survey of India (ASI), and State/UTs Governments. It aims to involve public sector companies, private sector companies and corporate citizens/individuals** to take up the **responsibility for making our heritage and tourism more sustainable** through development, operation and maintenance of world-class tourist infrastructure and amenities at ASI/ State heritage sites and other important tourist sites in India

➢ **Centre Rejects Minority Religious Tag To Lingayat And Veerashaiva Communities**

The centre reiterated its earlier stand **that these communities are part of the Hindu religion** and do not form another religion of their own.

Who are Lingayats and Veerashaivas?

- **Lingayats are followers of 12th-century social reformer Basavanna** and his ***vachana*** **(verses) philosophy while Veerashaivas** are a **sub-sect of Lingayats who preceded Basavanna.**
- **Veerashaivas worship Lord Shiva, the one mentioned in Hindu mythology but the Shiva that Basavanna referred to in his vachanas (verses) is not the Hindu god Shiva but the ishtalinga (formless God)**, which people of the community wear around their neck.
- **Veerashaivism has its roots in the Vedas and Agamas**, and they do not worship any god other than Shiva. The sub-sect can be found spread across states of Karnataka, Kerala, Maharashtra, Andhra Pradesh and Telangana.

	Veerashaiva	**Lingayat**
Founder	**Panchacharyas**	**Basavanna**
Religious Script	**Vedas, Agama, *Siddhanta Shikhamani***	**Vachana** literature
Caste And Gender Equality	No equality. It puts Aradhyas at the top of the ladder, while there is **no gender equality**	**Complete equality of men and women** in religious, political and social practices
Worship	The statue of Shiva, and **Shiva as envisaged in the Vedas** with snake around the neck etc	**Shiva (ishta linga) as a formless, timeless entity** that resides in each and every life form
Temples And Priests	Has a system of temples and priests	Bans temple worship. Worships only **ishta linga**

➢ **Sitarist Manju Mehta Gets 'Tansen Samman'**

- Noted sitar player Manju Mehta has been conferred with the 'Tansen Samman' for 2018 by the Madhya Pradesh government for her contribution in the field of music.
- The Tansen Music Festival is organised every year by the MP culture department in the memory of Tansen, one of the greatest artists in Indian history.
- **Meanwhile, the 'Raja Mansingh Tomar Honour' was given to the Sankat Mochan Pratishthan in Varanasi for 2017 and the Natrang Pratishthan of New Delhi for 2018**.
- The award is given to institutions for nurturing good music.

➢ **India's First Music Museum To Be Set Up In Thiruvaiyaru: Facts About The Trinity Of Carnatic Music**

- The country's first music museum will be set up with assistance from the Central Government in **Thiruvaiyaru, Tamilnadu, the birth place of Saint Tyagaraja**, one of the **Trinity of Carnatic music.**
- **The other two of the Trinity are Muthuswami Dikshitar and Syama Sastri.**
- Tyagaraja, also known as Tygayya in Telugu, was a renowned composer of Carnatic music, a form of Indian classical music. He was prolific and highly influential in the development of the classical music tradition.
- **Tyagaraja saw the reigns of four kings of Maratha dynasty Tulaja II (1763-1787), Amarasimha (1787-1798), Serfoji II (1798-1832) and Sivaji II (1832-1855), although he served none of them.**

➢ **A postal stamp dedicated to Nabin Chandra Das, inventor of Rosogolla was launched recently on Bagbazar-O-Rosogolla Utsob marking the 150th year of its invention**

➢ **1st January 2018 Marks the 201st Anniversary of Bhima Koregaon Battle.**

A battle was fought in Bhima Koregaon, a district in Pune with a strong historical Dalit connection, ***between the Peshwa forces and the British on January 1, 1818***. The British army, which comprised mainly of Dalit soldiers, fought the upper caste-dominated Peshwa army. The British troops defeated the Peshwa army. ***The victory was seen as a win against caste-based discrimination and oppression*****.**

➢ **The Archaeological Survey of India (ASI) recently declared that it has added six structures to the list of monuments of national importance, taking the total number to 3,693.**

- The six monuments declared as Monuments of national importance in 2018 are:

1. Old High Court Building in Nagpur, Maharashtra.
2. Haveli of Agha Khan in Agra.
3. Haveli of Hathi Khana in Agra.
4. Neemrana Baori in Rajasthan's Alwar district.
5. Group of Temples at Ranipur Jharail in Odisha's Bolangir district.
6. Vishnu Temple in Kotali, Pithoragarh district, Uttarkhand.

- According to **the Ancient Monuments and Archaeological Sites and Remains Act, 1958**, any structure, sculpture, inscription, etc., **which is in existence for not less than 100 years is termed ancient.**

➢ **Makaravilakku Festival Season**

- The **hill shrine of Lord Ayyappa in Kerala has been opened for the 21 day-long Makaravilakku festival season**, marking the concluding phase of the annual pilgrimage season.
- Makaravilakku is an annual festival held on Makar Sankranti in Kerala, at the shrine of Sabarimala.

➢ **Spiritual Circuit in Kerala**

- Prime Minister Narendra Modi recently inaugurated a project for the development of **spiritual circuit comprising three important pilgrimage centres 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.

➢ **World Hindi Day** is celebrated on **January 10** every year, first observed on January 10, 2006,marking the anniversary of first World Hindi Conference which was held in 1975 in Nagpur.

➢ **Kumbh Mela :The world's largest religious and cultural human congregation, 'Kumbh 2019'** began at Prayagraj (erstwhile Allahabad), Uttar Pradesh on January 15, 2019.

- **Kumbh Mela 2019 is Ardha KumbhMela(held six year after a Kumbh Mela depending on the celestial positions of Sun,Jupiter and Moon)**
- **Apart from Prayagraj, KumbhMela is also organised in Haridwar, Ujjain and Nasik.**
- **Haridwar (banks of Ganga),**
- **Nashik (banks of Godavari) and**
- **Ujjain (banks of Shipra)**
- The Kumbh Mela (the festival of the sacred pitcher) is **anchored in Hindu mythology**.
- It is **the largest public gathering and collective act of faith, anywhere in the world**.
- Crowds gather at the sacred **confluence of the Ganga, the Yamuna, and the mystical Sarasvati**. Primarily, this congregation includes Ascetics, Saints, Sadhus, Sadhvis, Kalpvasis, and Pilgrims from all walks of life.
- The Mela was **included in the list of "Intangible Cultural Heritage of Humanity" by UNESCO in 2017**.

➢ **Sangeet Natak Akademi (SNA) the National Academy of Music, Dance and Drama will** launch the second phase of the Web Campaign '**SANJHI-MUJH MEIN KALAKAR'**.

- It is an initiative to document and promote the Intangible Cultural Heritage (ICH) and diverse cultural traditions of the country by direct public-participation.
- The literal meaning of the term **SANJHI** is "to share" and "to partner".

➢ **Pravasi Bhartiya Divas 2019**

- ***The 15th annual Pravasi Bhartiya Divas (PBD) held in Varanasi, Uttar Pradesh***. Usually celebrated on or around 9th January, the grand scale of arrangements that went behind this year's celebrations pushed the event to January 21-23.

Some Facts :

- ***Theme*** : "**Role of Indian Diaspora in building New India**"
- ***Chief Guest :*** The Prime Minister of Mauritius, Pravind Jugnath.
- ***The reason 9th January*** is usually set aside for celebrating Pravasi Bhartiya Divas is that Mahatma Gandhi returned from South Africa on this day in 1915.

➢ **World Capital of Architecture**

- The United Nations Educational, Scientific, and Cultural Organization (UNESCO) has announced that the Brazilian city of **Rio de Janeiro will be the World Capital of Architecture for 2020**.
- **Rio will be the first city to receive the title under a program launched together by UNESCO and the International Union of Architects (UIA) in November last year**. The city will host the World Congress of UIA, in July 2020, an event that occurs every three years

➢ **National Museum of Indian Cinema (NMIC) has been inaugurated in Mumbai**. The museum depicts the journey of over a century of Indian cinema in a story telling mode with the help of visuals, graphics, artifacts, interactive exhibits and multimedia expositions.

➢ The restoration of the **Chowmahalla Palace** to its age-old grandeur has been completed.

Key Facts

- **Chowmahalla Palace structure dates back to late 18th century,** is **a palace of the Nizams of Hyderabad state**, **completed in the mid 19th century during the reign of Asaj Jah V.**
- It was **the seat of the Asaf Jahi dynasty and was the official residence of the Nizams of Hyderabad while they ruled their state**.
- The palace was **built by Nizam Salabat Jung**. It is **mainly associated with the ----the coronation of Mukarram Jah Nizam VIII in 1967** after the demise of his grandfather Nizam VII Mir Osman Ali Khan.

➢ **MANIYARO**

- **Maniyaro** is **a variety of folk dance of Gujarat**.
- It carries the **sentiments of heroism in the Dandiya Ras** of **Maher community** in Gujarat.
- In Gujarat and especially in Saurashtra region, generally Men wear traditional costumes, having preset sized wooden sticks and present Maniyaro.

Maniyaro is usually being played with the ancient instruments like Drum, Flute, and RAVAN Hattho etc

- **Pravasi Teerth Darshan Yojana**

Highlights of Yojana

- Under the scheme, **a group of Indian diaspora will be taken on a government-sponsored tour of religious places in India twice a year.**
- The group will be taken to the **religious places of all major religions in India**.
- The tour would be **completely government sponsored**.
- Under the eligibility criteria, **all people of Indian-origin, aged between 45 and 65 can apply and a group will be selected out of them**.
- **The first preference will be given to people from 'Girmitiya countries'** such as Mauritius, Fiji, Suriname, Guyana, Trinidad and Tobago and Jamaica. The term Girmitiya was ***coined by Mahatma Gandhi*** who referred to himself as first Girmitiya. The countries where these indentured Indian labourers settled are known as ***Girmitiya countries***.

- **Madhya Pradesh Government** is going to create an **Adhyatmik Vibhag (spiritual department)** by merging several existing departments.

- **Modi Renames 3 islands of Andaman and Nicobar**

- **On December 30, 1943, Subhas Chandra Bose had suggested that Andaman and Nicobar Islands be renamed as Shahid and Swaraj Dweep respectively.**
- The **Ross Island** was renamed as **Netaji Subhas Chandra Bose Dweep**, the **Neil Island as Shaheed Dweep** and the **Havelock Island as Swaraj Dweep**

- **Gangotri and Yamunotri in Uttrarakhand, Amarkantak in Madhya Pradesh and Parasnath in Jharkhand under PRASAD Scheme**

- **PRASAD Scheme:** It was launched in 2014-15 by Union Ministry of Tourism. It aims at integrated advancement of pilgrimage destinations in planned, prioritised and sustainable manner to provide entire religious tourism encounter. It focuses on the growth and beautification of the identified pilgrimage destinations**.**
- With the new additions, the number of sites under the Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive (PRASAD) launched by the ministry in 2014-15 has now become 41 in 25 states.

- **Kamsale — Folk Instrument From Karnataka**

- **An 11th century percussion instrument, Kamsale belongs to the category of idiophones. It is referred to as Batlu and Kaitala** in ancient texts such as the *Basava Purana* by Bheema Kavi, *Chennabasava Purana* by Virupakshapandita, *Girija Kalyana* by Harihara and *Shabdamanidarpana* by Keshiraja.
- This is the main instrument used in the **Kamsale dance,which is named after the instrument.** This form incorporates both the elements of dance and martial arts. The devotees of Lord Mahadeshwara practice and perform this art form.

➢ **PM Modi Releases Stamp On Suheldev**

- A commemorative postal stamp on the Maharaja Suheldeo was released by the Prime Minister in Ghazipur.
- Though Suheldev's historical existence is shrouded in mystery, he is today popular as a caste icon among the Rajbhars (OBC) and the Pasis (second largest Dalit caste in U.P.), both of whom have been competing for his legacy.

➢ **3rd edition of 'Dwijing Festival' celebrated to promote river tourism**

- **Dwijing Festival is an annual river festival celebrated in the Bodoland Territorial Area Districts, To promote the river tourism in the rural areas of the Bodoland Territorial Council (BTC)**
- The festival was initiated in the year 2016-17 under the **moniker of "Aie River winter festival" on the bank of river Aie in the Chirang district of BTC** with an aim to promote the local tourism and culture.
- Later, **the festival was changed to "DWIJING" meaning "RIVER BANK"** and it became the annual River Festival of the region.

SOCIAL ISSUES

EDUCATION

➢ **National Integration Tour Students from North Eastern States**

- The National Integration Tours are educational and motivational tours for youth of **Jammu & Kashmir and North Eastern States,** with an aim to provide an insight into the rich heritage of the country as well as various developmental and industry initiatives that are underway.
- The National Integration Tour has been initiated as part of the **Indian Army's ongoing outreach programme to foster the spirit of National Integration** across the entire swathe of the country.

➢ **Eklavya Model Residential Schools**

- In the context of establishing quality residential schools for the promotion of education, **Eklavya Model Residential Schools (EMRSs) for ST students** are set up in States / UTs with provisioning of funds through "Grants **under Article 275(1) of the Constitution**..
- **The establishing of EMRSs are based on demand of the concerned States/UTs with availability of land as an essential attribute**. As per the budget 2018-19, every block with more than 50% ST population and at least 20,000 tribal persons, will have an **Eklavya Model Residential School by the year 2022.**

➢ **India to Participate in PISA 2021**

- The Union Human Resources Development Ministry has signed an agreement with ***Organisation for Economic Co-operation and Development (OECD)*** for India's Participation in Programme for International Student Assessment- PISA 2021.
- The students will be selected by PISA through random sampling. **The schools run by Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS) and schools in the UT of Chandigarh would be participating**.
- India's participation in PISA- 2021 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.
- It is **an international assessment that measures 15-year-old students' reading, mathematics, and science literacy every three years**.

➢ **A government committee headed by IIT-Hyderabad chairman B V R Mohan Reddy has submitted its report and that its suggestions are being considered by AICTE.**

Important Recommendations made by Committee

- **To stop setting up new colleges from 2020 and review the creation of new capacity every two years after that.**
- No additional seats should be approved in traditional engineering areas such as mechanical, electrical, civil and electronics and suggests that institutes should be encouraged to convert current capacity in traditional disciplines to emerging new technologies.

- To introduce undergraduate engineering programmes exclusively for artificial intelligence, blockchain, robotics, quantum computing, data sciences, cybersecurity, 3D printing and design.

➢ **Jan Shikshan Sansthans**

- **Jan Shikshan Sansthans (JSS) were established to provide vocational training** to non-literate, neo-literate, as well as school dropouts by identifying skills as would have a market in the region of their establishment.
- The government has unveiled new **guidelines for Jan Shikshan Sansthans (JSS)** aligning them to the **National Skills Qualification Framework** with an aim to providing standardised training across sectors.
- Alignment of JSS course and curriculum with National Skill Qualification Framework (NSQF) to standardize training.
- Decentralization of powers for JSSs by providing accountability and independence to district administration.
- Evidence-based assessment system.
- Training of Trainers to develop the capacity through National Skills Training Institutes.

➢ **Right of Children to Free and Compulsory Education (Amendment) Act, 2019**

- The **Right of Children to Free and Compulsory Education (Amendment) Act, 2019** has received the assent of the President of India. The bill mainly seeks **to do away with the no-detention policy in schools**.
- The legislation is significant as it brings accountability in the elementary education system.
- The Bill seeks to amend the Right to Education (RTE) Act **to abolish the "no-detention" policy in schools**. Under the current provisions of the Act, **no student can be detained up to class VIII**.
- As per the amendment, **it would be left to the states to decide whether to continue the no-detention policy**.
- **The bill provides for regular examination** in classes V and VIII, and if a child fails, the amendment bill grants a provision to give her or him additional opportunity to take a re-examination within two months. Such children will be **provided with two-month remedial teaching to perform better in the re-examinations**. If the students still do not pass the exam, **the state government may decide to detain them.**

➢ **70 Point Grading Index To Access States On Schooling System**

- The government has launched a ***70 point Performance Grading Index (PGI)*** to assess areas of deficiency in each state's school education system so that targeted interventions can be made at every level from pedagogy to teacher training.
- The index is aimed at helping states understand where they may be lagging behind and prioritise areas for intervention to ensure that the school education system is robust at every level.
- **The union Human Resource Development (HRD) ministry is compiling this schooling index**.
- The 70 indicators will grade state schooling systems on areas like number of existing teacher vacancies, number of direct entry recruitments especially at leadership positions, school infrastructure and so on.

➢ **Annual Status of Education Report (ASER) 2018**

The Annual Status of Education Report (ASER) 2018 has been published by education non-profit Organization Pratham.

Highlights of the report*:*

- Indian students, especially those in elementary school (Classes I-VIII), are not learning enough. To cite a metric, only half (50.3%) of all students in Class V can read texts meant for Class II students.
- The deficit is across government and private schools. Traditionally, students in private schools have fared better than their government school counterparts, but that's a relative situation. For example, while 40% of Class VIII students in government schools can do simple division, the figure is 54.2% in private schools.
- However, there is gradual improvement in some segments and in some states. The reading ability among Class V students in Kerala jumped 10 percentage points in 2018 from that in 2016. In Himachal Pradesh, the growth is nearly 8 percentage points and in Chhattisgarh and Odisha it is around 7 percentage points between 2016 and 2018.
- While 30.9% of students in the 6-14 age group were in private schools in 2018, the figure was **30.6% in 2016 and 30.8% in 2014. This is less than a percentage point growth since 2014.**

HEALTH AND SANITATION

➢ **WHO's List of 10 Global health threats**

The World Health Organisation (WHO) list of ***10 global health threats*** which demand immediate attention from WHO and health partners in 2019 has been released.

List of 10 health threats are :

- Air pollution and climate change.
- Non-communicable diseases.
- Global influenza pandemic.
- Fragile and vulnerable settings: More than 22% of the world population lives in places where protracted crisis (through a combination of challenges such as drought, famine, conflict and population displacement) and weak health services leave people without access to basic care.
- Antimicrobial resistance.
- Ebola and other high-threat pathogens.
- Weak primary health care.
- Vaccine hesitancy: Vaccination is one of the most cost-effective ways of avoiding disease, however, the reluctance or refusal to vaccinate despite the availability of vaccines, threatens to reverse progress made in tackling vaccine-preventable diseases.
- Dengue
- HIV

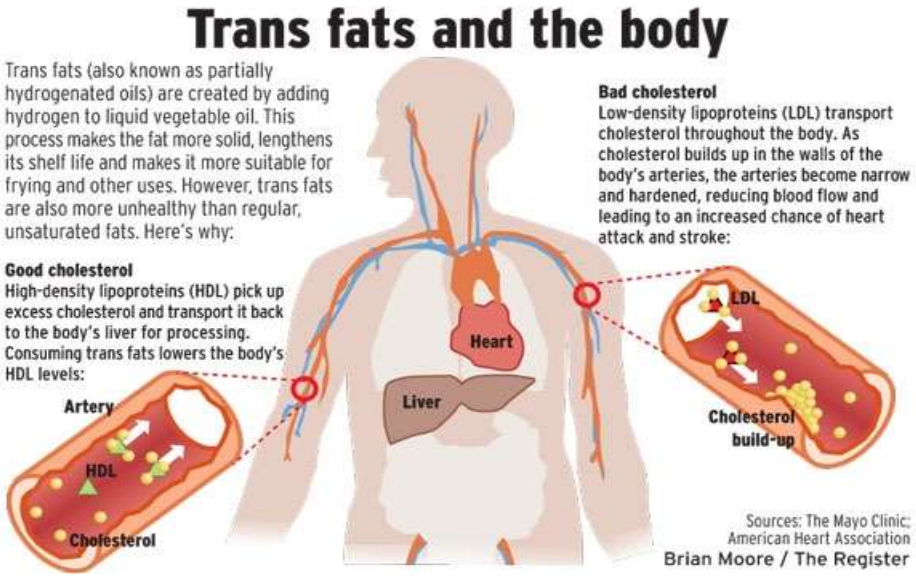
➢ **Non-communicable diseases and WHO Reports**

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, claiming 8.5 million lives each year, according to the World Health Organisation (WHO).

- Containing the NCDs has been listed by the WHO as its health goal for this year along with reducing mortality related to air pollution and climate change, global influenza pandemic etc.
- 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 and 69.
- The NCDs disproportionately affect the poor, impoverish families, and place a growing burden on health care systems**.**

➢ **FSSAI Launches Heart Attack Campaign To Eliminate Trans Fat**

- Food Safety and Standards Authority of India (FSSAI), has launched a mass media campaign "Heart Attack Rewind" with the aim to get rid of "bad cholesterol" from the food supply by 2022, a year ahead of the global target by the World Health Organization to eliminate industrially- produced trans-fat from the global food supply by 2023.



- For further Details on Trans Fats and FSSAI, refer to the **Quick Revision for Prelims (Jun-Nov, 2018) Magazine.**

➢ **Global Nutrition Report 2018 released by WHO**

- A third of the world's stunted children under five — an estimated 46.6 million who have low height for age — live in India.
- A quarter of the children display wasting (that is, low weight for height) as well.
- District-level data show high and very high levels of stunting mainly in central and northern India (more than 30% and 40%, respectively), but less than 20% in almost the entire south.
- India also figures among the set of countries that has more than a million overweight children. The other nations are China, Indonesia, India, Egypt, US, Brazil and Pakistan.

➢ **Govt To Regulate Four More Medical Devices**

- Four more medical devices — **nebulisers, glucometers, digital thermometers and blood pressure monitors** — have been notified in the latest addition to product categories under the Drugs and Cosmetics Act,1940 which will ensure their quality and performance.
- This means such devices will be under regulation and their import, manufacture and sale will be under scrutiny. Twenty-seven product categories are now notified under the Act.

- The devices include **catheters, cardiac stents, drug eluting stents, intra-ocular lenses, disposable hypodermic syringes, heart valves and orthopaedic implants**, among others.
- Drugs Technical Advisory Board (DTAB) is the highest decision-making body under the Union health ministry on technical matters.

➢ **CDSCO Issues Safety Guidelines For Isotretinoin**

- The Central Drugs Standard Control Organisation (CDSCO) has issued safety guidelines for **Isotretinoin, an oral drug, which is used in the treatment of severe acne**.
- Isotretinoin capsules of 10 mg/20 mg were approved by CDSCO in 2002 for the treatment of cystic and conglobate acne, and severe nodular acne unresponsive to antibiotic therapy.
- It was later found that **Isotretinoin can cause birth defects** in progeny if not taken without proper guidance.

- The Central Drugs Standard Control Organisation (CDSCO) is under Directorate General of Health Services,
- Ministry of Health & Family Welfare, Government of India is **the National Regulatory Authority (NRA)**
- **of India**. **CDSCO along with state regulators, is jointly responsible for grant of licenses of certain specialized categories of critical Drugs** such as blood and blood products, I. V. Fluids, Vaccine and Sera.

➢ **Indian Government Rebuts Zika Travel Alert From US Health Agency (CDC)**

- India has asked the **United States' public health agency, the Centers for Disease Control and Prevention(CDC)**, to "withdraw or modify" an advisory it issued on December 13 warning people against travelling to Rajasthan due to an outbreak of the Zika virus**.**
- **The CDC had said the virus was endemic to India** and pointed out "there is an unusual increase in the number of Zika cases in Rajasthan and surrounding states."
- The government took exception to **the use of "endemic" in the advisory as Zika outbreaks** in India have been contained within small areas.
- Indian Council of Medical Research have reportedly shown that **Zika strains in the country are less virulent than in Brazil and are not associated with microcephaly.**
- The National Institute of Virology in Pune has said that the **gene responsible for causing microcephaly in Brazil is absent in the Indian strain.**

➢ **Menstrual Hygiene For Adolescent Girls Scheme.**

✓ To address the need of menstrual hygiene among adolescent girls residing primarily in rural areas, Government of India is supporting the Menstrual Hygiene Scheme.

✓ **Funds are provided to States/UTs through National Health Mission for decentralized procurement of sanitary napkins packs** for provision primarily to rural adolescent girls at subsidized rates as per proposals received from the States and UTs in their Programme Implementation Plans.

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

✓ **Department of Health Research, under the Ministry of Health, is involved in assessment of all newer, alternative, environment friendly menstrual hygiene products** to look into their safety and acceptability features.

➢ **Formalin in Fish**

Bihar's health department has imposed a blanket ban for 15 days on sale of fish from Andhra Pradesh and West Bengal in capital Patna after samples were found to be contaminated with formalin. **The ban includes storage and transportation of fish from Andhra Pradesh and West Bengal.**

About Formalin: Formalin is **a toxic, colourless solution that is derived by dissolving formaldehyde gas in water**

- It is **a cancer-inducing chemical used to preserve fish** and is used as a disinfectant. It is used in the manufacture of pesticides, fertilisers, glue, paper and paint, among other products.
- **Formalin causes** irritation in the eyes, throat, skin and stomach. In the long run continued exposure causes harm to the kidneys, liver and can even cause cancers.

➢ ***'One-Time Financial Assistance' For Rare Diseases***

- Government has announced ***a 'one-time financial assistance' for Rare diseases***. The standing finance committee has approved a proposal for adding a sub-component under the umbrella scheme **of *Rashtriya Arogya Nidhi (RAN)*** for provision of one-time financial assistance to those below threshold poverty line for specified rare diseases which require one-time treatment.
- A rare disease, ***also referred to as an orphan disease, is any disease that affects a small percentage of the population***.
- ***Most rare diseases are genetic, and are present throughout a person's entire life***, even if symptoms do not immediately appear. In Europe a disease or disorder is defined as rare when it affects less than 1 in 2000 citizens.

WOMEN AND CHILD

➢ **Kerala government had on January 1st organised the Women's Wall or Vanitha Mathil to "protect renaissance values".**

- Around thirty lakh women formed a human chain across the National Highway from **Kasargod to Thiruvananthapuram**, around **620-kilometre long**.
- Organised by the government and supported by various social organisations having links with the renaissance movement, the Women's Wall is **an attempt by the government to defend the state from communal forces and in support of Sabarimala verdict of the Supreme court.**

➢ **National Girl Child Day**

National Girl Child Day (NGCD) was observed on ***24th January*** with objectives of ***generating awareness*** on the issue of declining ***Child Sex Ratio (CSR)*** and create a positive environment around valuing the girl child. The programme also observed ***anniversary of Beti Bachao Beti Padhao (BBBP) Scheme***. National Girl Child Day was first initiated in 2008.

Theme: "Empowering Girls for a Brighter Tomorrow".

Objectives:

- ✓ To increase the consciousness of the people and offer new opportunities to the girl child in the society.
- ✓ To remove all the inequalities faced by the girl child.
- ✓ To ensure that the girl child should get all their human rights, respect and value in the country.
- ✓ To work regarding gender discrimination, to educate people.

➢ **Sambhav**

- **Men Against Violence and Abuse (MAVA**), which works to prevent gender-based violence, will travel to 9 cities and 4 districts this year with its two-day travelling film festival called 'Sambhav'.
- The festival tries to cover the lives and issues of all genders. There are films on gender discrimination and sexual harassment but also on toxic masculinity and its impact on men and boys. There are also films portraying the stigma and inhumane treatment faced by homosexual and transgender people.

➢ **India Ranks 108th In WEF Gender Gap Index; Scores Third-Lowest On Health**

- India made no improvement in overall gender gap ranking by the **World Economic Forum (WEF) in 2018**, compared to 2017. It stood at a low 108 out of the 149 countries in 2018, the same as in 2017.
- **The global list was topped by Iceland**, having closed more than 85.8 per cent of its overall gender gap. Iceland holds the top spot in the index for the 10th consecutive year.
- The country continues to rank third-lowest in the world on health and survival. Neighbouring Sri Lanka stood at the top position on the health and survival category.

CUT A SORRY FIGURE

India's ranking in gender-gap report

	2017	2018
Overall ranking	108	108
Economic participation & opportunity ranking	139	142
Educational attainment ranking	112	114
Health and survival ranking	141	147
Political empowerment ranking	15	19

Source: World Economic Forum

➢ **Ujjwala Sanitary Napkins Initiative**

- The Ujjwala Sanitary Napkins initiative by three oil marketing companies – IOCL, BPCL and HPCL.
- The three companies will set up 100 manufacturing units at the Common Service Centres (CSC) covering 93 Blocks across 30 districts of Odisha at an estimated cost of ₹2.94 crore.
- The mission, which forms part of the CSR initiative of OMCs in Odisha, 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.
- These napkins will be **priced at ₹40 per pack**, each containing eight pads. 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 minimal carbon footprint

➢ **MAHILA POLICE VOLUNTEERS**

- **The Ministry of Women and Child Development in collaboration with the Ministry of Home Affairs** has envisaged engagement of **Mahila Police Volunteers (MPVs*)*** in the States and Union Territories who will act as a link between police and community and help women in distress.

- **Haryana is the first state to adopt the initiative at Karnal and Mahindergarh District on a pilot basis under Nirbhaya Fund** during the financial year 2016-2017.
- The Mahila Police Volunteers scheme envisages creation of a **link between the police authorities and the local communities in villages through police volunteers** who will be women specially trained for this purpose.
- MPV must be atleast **21 years old and class 12th pass.**

➢ **Capacity Building Programme for Elected Women Representatives (EWRs) of Panchayati Raj Institutions**

- The Government of India has initiated the Capacity Building Programme for Elected Women Representatives (EWRs) of Panchayati Raj Institutions with an objective of empowering them by developing leadership capacities so that they serve as catalysts for social change and function as peer facilitators in the field, become vocal for their rights and participate effectively in the governance processes.
- The Capacity Building Programme undertaken by **Ministry of Women and Child Development is a significant endeavour in creating a forum for EWRs** to understand their roles and responsibilities in a more prolific manner

➢ **Central Guidelines For Crèches At Workplaces**

- The Centre has prepared guidelines for setting up of crèches at workplaces, which prescribe trained personnel to man the facility as well as infrastructure requirements and safety norms.
- **In March,2018, Parliament passed the Maternity Benefit Amendment Act, 2017**, enhancing **paid maternity leave from a period of 12 weeks to 26 weeks**. The law is applicable to all institutions with 10 or more employees. It also makes it mandatory for every organisation with 50 or more employees to have a crèche**.**

- The guidelines recommend that a crèche be either at the workplace or within 500 metres of it. Alternatively, it could also be in the beneficiaries' neighbourhood.

➢ **Web -Wonder Women Campaign**

- The Ministry of Women and Child Development, Government of India has launched an online campaign Web- Wonder **Women to discover and celebrate the exceptional achievements of women, who have been driving positive agenda of social change** via social media**.**
- The Campaign has been launched by the Ministry of Women and Child Development, Government of India in association with the NGO Breakthrough and Twitter India.

- Through the campaign, the Ministry aims to recognize the fortitude of Indian women stalwarts from across the globe who have used the power of social media to run positive & niche campaigns to steer a change in society. The Campaign is aimed at encouraging, recognizing and acknowledging the efforts of these meritorious Women.

➢ **Women of India Organic Festival**

- The ***Ministry of Women and Child Development Organized*** *the three-day 6th* ***'Women of India Organic Festival'*** in Chandigarh, ***to celebrate and promote women farmers and entrepreneurs in the organic sector from the remotest parts of India****.*
- The Festival will offer on sale the biggest selection of organic products ranging from food, fabrics and furniture to wellness, personal care and solar products.
- The Women of India Festival is also **intended to highlight the health and environmental advantages of organic goods, provide a platform for women engaged in this economy and encourage the development of sustainable and easily accessible sales outlets for organic producers from remote areas**.

VULNERABLE GROUPS (Tribes, Senior Citizen, Minorities, OBCs, SC/STs, Disabled etc)

➢ **Habitual Offenders Act**

- The term, '**De-notified and Nomadic Tribes'**, can be traced to the **Criminal Tribes Act (CTA) of 1871**. The colonial government notified nearly 200 tribal communities to be hereditary criminals, cementing their societal identity as outcasts and subjecting them to constant harassment by the administration.
- After India gained Independence, these tribes were 'de-notified' from the list of Criminal Tribes, and, hence, the term. It is only in independent India that the need was felt to shift the collective burden of criminality to the individual, which led to the CTA being repealed and the **Habitual Offenders Act (HOA) being enacted in various States**
- However, the HOA functioned as a mere extension of the CTA. Nomadic and semi-nomadic communities continued to face harassment at the hands of law enforcement agencies.
- **The first National Commission for Denotified, Nomadic and Semi-nomadic Tribes (NCDNT) was constituted in 2003**. The recommendations found an echo in the Idate Commission, constituted with the similar mandate in 2015.
- The NCDNT report clearly recommends repealing the various HOAs

➢ **Centre Amends Rules For Minorities From Three Nations**

- The contentious Citizenship (Amendment) Bill, 2016, is pending in Parliament, but the Union Home Ministry has notified amendments to the Citizenship Rules, 2009, to include a **separate column in the citizenship form for applicants belonging to six minority communities from Pakistan, Afghanistan and Bangladesh.**
- Under the amendments, a separate entry in the form will ask the applicant: **"Do you belong to one of the minority communities from Afghanistan, Bangladesh and Pakistan — Hindus, Sikhs, Buddhists, Parsis, Jains and Christians?"**

- A parliamentary committee has been examining the **Citizenship (Amendment) Bill, 2016, that proposes citizenship to six persecuted minorities — Hindus, Jains, Sikhs, Parsis, Christians and Buddhists — from Pakistan, Afghanistan and Bangladesh, who came to India before 31st December 2014.**
- It has run into strong resistance in Assam because it will pave the way for giving citizenship mostly to illegal Hindu migrants from Bangladesh in Assam, who came after March 1971, in violation of the **1985 Assam Accord.**
- The Supreme Court on December 12, 2018 extended the deadline for the submission of claims and objections by individuals excluded from the first draft of the Assam National Register of Citizens (NRC) to December 31, 2018.

For details on **NRC**, refer to the **Quick Revision for Prelims(Jun-Nov 2018)**.

➢ The Lok Sabha has passed ***the Personal Laws (Amendment Bill), 2018***, which seeks to ***remove leprosy as a ground for divorce***. Leprosy is being removed as a ground for divorce as it is now a curable disease as against the earlier notion of it being incurable.

- Personal Laws (Amendment) Bill, 2018, seeks to end the discrimination against leprosy persons in various central laws: ***the Divorce Act, 1869; the Dissolution of Muslim Marriages Act, 1939; the Special Marriage Act, 1954 etc***.
- The Bill ***eliminates leprosy as a ground for dissolution of marriage or divorce***.
- ***The amendments introduced in the Bill omit the provisions which stigmatise and discriminate against leprosy-affected persons***.
- The Bill is meant ***to provide for the integration of leprosy patients into the mainstream***. It is in keeping with the ***UN General Assembly Resolution of 2010 on the 'Elimination of discrimination against persons affected by leprosy and their family members'.***

➢ ***National Action Plan for Drug Demand Reduction (2018-2023)***

- The ***Ministry of Social Justice and Empowerment*** has drafted ***National Action Plan for Drug Demand Reduction (2018-2023)*** for addressing the problem of drug and substance abuse in the country, dumping a long-pending draft policy on the matter.
- Employ ***a multi-pronged strategy*** involving education, de-addiction and rehabilitation of affected individuals and their families to address the issue.
- ***Focus on*** preventive education, awareness generation, counselling, treatment and rehabilitation of drug-dependent people.
- ***Involvement of stakeholders:*** Coordination with implementing agencies for controlling the sale of sedatives, painkillers and muscle relaxant drugs, holding awareness generation programmes and checking online sale of drugs by stringent monitoring by the cyber cell are proposed under the Action Plan.
- ***Increase community participation and public cooperation*** in the reduction of demand by involving Panchayati Raj institutions, Urban Local Bodies, Nehru Yuva Kendra Sangathan and other local groups like Mahila Mandals, self-help groups etc to tackle the menace of drugs.

- **The Rural Development Ministry has proposed to bring in the following changes in monthly pensions under the *National Social Assistance Programme (NSAP)***

- For the elderly poor, disabled and widows pensions are to be increased from the current ₹200 to ₹800.
- For those above the age of 80, the proposal is to increase the pension from ₹500 to ₹1,200 a month.
- The NSAP is ***a centrally Sponsored Scheme under the Ministry of Rural Development***. It came into effect from 15th August,1995.
- It represents a significant step towards the ***fulfillment of the DPSP in Article 41 of the Constitution***. In particular, ***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***.

- **Jiban Sampark Project of Odisha**

- ***Odisha has launched Jiban Sampark project*** for the welfare of the Particularly Vulnerable Tribal Groups.
- The Project is being undertaken **in association with UNICEF**.
- It aims **to generate awareness among Particularly Vulnerable Tribal Groups (PVTG) 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 groups

- **Hunar Haat**

Hunar Haats are ***organised by Ministry of Minority Affairs under USTTAD (Upgrading the Skills & Training in Traditional Arts/Crafts for Development) scheme***.

- Hunar Haats have become a successful mission to provide employment and income generation opportunities with platforms for marketing the products of master artisans, craftsmen and culinary experts belonging to the minority communities.
- It envisages at boosting the skill of craftsmen, weavers and artisans who are already engaged in the traditional ancestral work.

- **J&K Roshni Act Repealed**

- **Jammu and Kashmir State Lands (Vesting of Ownership to the Occupants) Act, 2001**, popularly known as the **Roshni Act:** The Roshni Act envisaged the transfer of ownership rights of state land to its occupants, subject to the payment of a cost, as determined by the government.
- **The government's target was to earn Rs 25,000 crore by transferring 20 lakh kanals of state land to existing occupants against payment at market rates**. The government said the **revenue generated would be spent on commissioning hydroelectric power projects, hence the name "Roshni**".
- In 2014, a **report by the Comptroller and Auditor General (CAG)** estimated that **against the targeted Rs 25,000 crore, only Rs 76 crore had been realised from the transfer of encroached land between 2007 and 2013**, thus defeating the purpose of the legislation.

- **What is Witness Protection Scheme?**

- The Supreme Court approved **India's first Witness Protection Scheme**, noting that **one of the main reasons for witnesses to turn hostile is that they are not accorded appropriate protection by the State**.
- The important features of the Witness Protection Scheme, 2018 include identifying categories of threat perceptions, preparation of a 'Threat Analysis Report' by the head of the police, protective measures like ensuring that the witness and accused do not come face to face during probe, protection of identity, change of identity, relocation of witness, witnesses to be apprised of the scheme, confidentiality and preservation of records, recovery of expenses etc.

The programme identifies "three categories of witnesses as per threat perception.

Category A: Those cases where threat extends to life of witness or family members during investigation, trial or even thereafter.

Category B: Those cases where the threat extends to safety, reputation or property of the witness or family members during the investigation or trial.

Category C: Cases where the threat is moderate and extends to harassment or intimidation of the witness or his family members, reputation or property during the investigation, trial or thereafter

- The **approved scheme shall be the law' under Article 141/142 of the Constitution**, until the enactment of suitable Parliamentary and/or State Legislations on the subject

- **Jammu And Kashmir Becomes First State To Bring Law Against "Sextortion"**

- Jammu and Kashmir has become the first state in the country to have a law banning **sexual exploitation of women by those in positions of authority, having a fiduciary relationship or a public servant.**
- Amendments are being made in section 154, 161 and Schedule of Criminal Procedure Code and section 53 A of the Evidence Act so as to bring sextortion at par with similar offences prescribed under **Ranbir Penal Code**, and amendment is being made in the **Prevention of Corruption Act to amend the definition of misconduct and provide that demand for sexual favours** would also constitute misconduct **within the meaning of section 5.**
- **The Ranbir Penal Code (RPC) applicable in Jammu and Kashmir** is based on the **Indian Penal Code.**

➢ **New High Court For Andhra Pradesh**

- In pursuance of **article 214** of the Constitution and the Order issued by the **Supreme Court of India** and in exercise of powers conferred under various clauses of **section 31 of the Andhra Pradesh Reorganisation Act, 2014**, the President has constituted a separate High Court for the State of Andhra Pradesh, namely, the High Court of Andhra Pradesh.
- The new High Court for Andhra Pradesh will be the ***25th High Court in the country***. The new Andhra HC is expected ***to function from a temporary structure in Amaravati*** till a permanent building is set up at the 'Justice City' being planned in Amaravati.
- **Article 214** provides that every State shall have a High Court, however, ***Article 231*** states that ***Article 214***shall not be a bar for constituting a common high court for two or more States.
- **Only Parliament may by law establish a Common High Court for two or more States**. This means that, unless Parliament by law establishes a Common High Court for two or more States, every State has to have a High Court, i.e., upon formation of a new State a new High Court is also formed.

➢ **Proposal for Dam Safety Bill, 2018 Approved**

- Bill will enable all states & UTs of India to adopt uniform dam safety procedures **that will**
  ensure safety of dams & will safeguard their benefits.

➢ **Lok Sabha Passes Transgender Rights Bill**

- The Transgender Persons (Protection of Rights) Bill, 2016, seeking to define transgenders and prohibit discrimination against them, was introduced in the Lok Sabha two years ago.

✓ **According to the new definition**, a **transgender person is somebody "whose gender does not match the gender assigned to that person at birth** and includes trans-men or trans-women, persons with intersex variations, gender-queers, and persons having socio-cultural identities such as kinnar, hijras, aravani, and jogta".

✓ The Bill states that a person will be recognised as transgender on the basis of a certificate of identity issued through the district screening committee. This certificate will be a proof of identity as transgender and confer rights under this Bill.

✓ **The Transgender Bill does not mention any punishments for rape or sexual assault of transgender persons** as according to Sections 375 and 376 of the Indian Penal Code, rape is only when a man forcefully enters a woman.

➢ **National e-Vidhan Application (NeVA) Project**

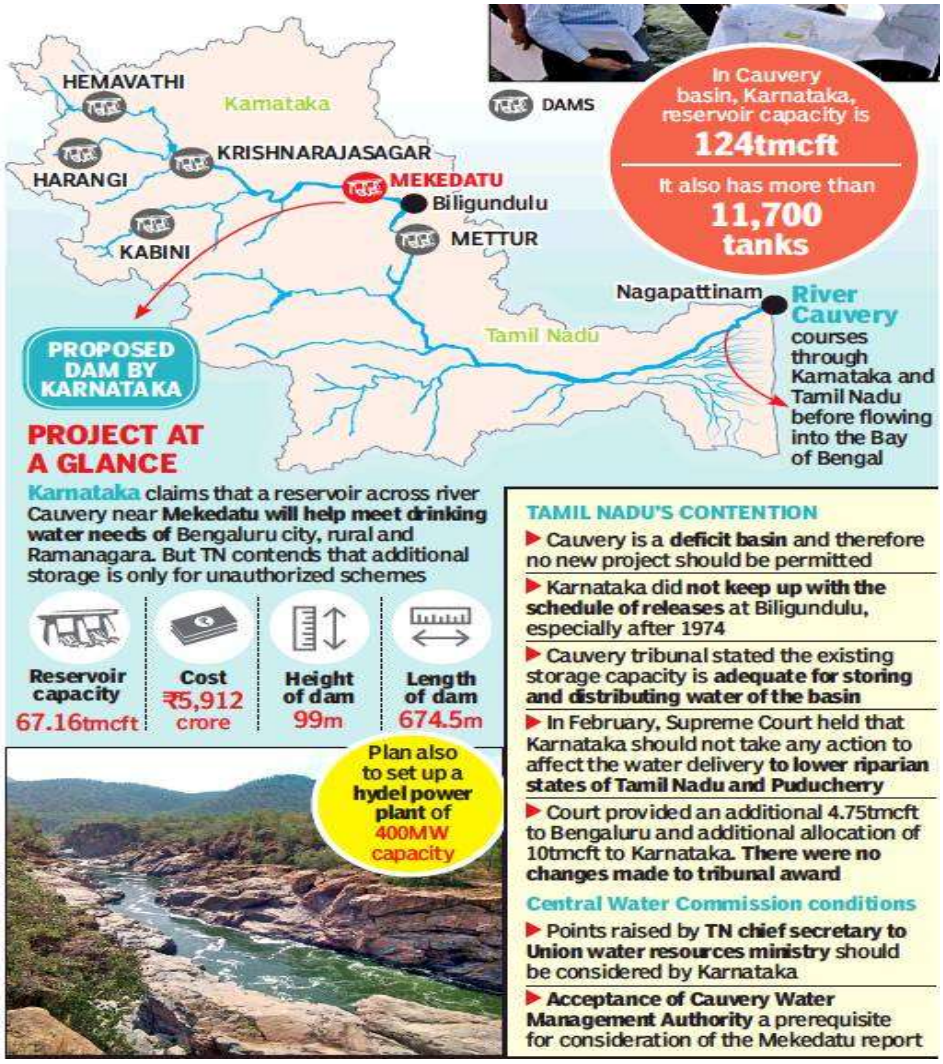
- **NeVA aims** to bring all the legislatures of the country together, in one platform thereby creating a massive data depository without having the complexity of multiple applications.
- NeVA is a device neutral and member centric application created to equip them to handle diverse House Business smartly by putting entire information regarding member contact details, rules of

procedure, list of business, notices, bulletins, bills, starred/unstarred questions and answers, papers laid, committee reports etc.

- Paperless Assembly or e-Assembly is a concept involving of electronic means to facilitate the work of Assembly. It enables automation of entire law making process, tracking of decisions and documents, sharing of information.
- **e-Vidhan is a Mission Mode Project (MMP) included in Digital India Programme** and Ministry of Parliamentary Affairs (MoPA) is the 'Nodal Ministry' for its implementation in all the 31 States/ UTs with Legislatures

➢ **Why A Dam In Karnataka Bothers Tamil Nadu**

- Being set up by the Karnataka government, the **project is near Mekedatu**, in Ramanagaram district, across the river **Cauvery** from Tamil Nadu**.**
- Its primary objective is to **supply drinking water to Bengaluru** and recharge the groundwater table in the region**.**
- Tamil Nadu has moved the Supreme Court. Its main argument is that the project violates the final award of the Cauvery River Water Tribunal, and that the "construction of the two reservoirs would result in impounding of the flows in the intermediate catchment below the Krishnaraja Sagar and Kabini reservoirs, and Billigundulu in the common border of Karnataka and Tamil Nadu.



➢ The **Ministry of Personnel, Public Grievances and Pensions** has initiated an inter-ministerial consultation note to rename the ***Indian Forest Service as Indian Forest and Tribal Service***. The consultation note also contains the proposal to train the cadre to be more receptive towards tribals and forest dwellers

➢ **The Supreme Court, has ordered the Centre to hold a public hearing in the Polavaram multi-purpose project affected area in Odisha and Chhattisgarh.**

- **The Polavaram project was accorded national status in 2014** in the Andhra Pradesh Bifurcation Act and its design was changed.
- Polavaram Project is a multi-purpose irrigation project. The dam across the Godavari River is under construction located in West Godavari District and East Godavari District in Andhra Pradesh state and its **reservoir spreads in parts of Chhattisgarh and Orissa States also.**
- **The Andhra Pradesh government has bagged the Central Board of Irrigation and Power (CBIP) award** for speedy execution of Polavaram multipurpose project on the Godavari river.

➢ **National Clean Air Programme**

The government has announced the National Clean Air Programme (NCAP). This is the first ever effort in the country to frame a national framework for air quality management with a time-bound reduction target.

✓ ***The programme will not be notified under the Environment Protection Act or any other Act*** to create a firm mandate with a strong legal back up for cities and regions to implement NCAP in a time bound manner for effective reduction.

✓ ***To Achieve a national-level target*** of 20-30% reduction of PM2.5 and PM10 concentration by between 2017 and 2024.

✓ ***Central Pollution Control Board (CPCB) will execute this nation-wide programme*** in consonance with the section 162 (b) of the Air (Prevention and Control of Pollution) Act, 1986.

✓ ***The plan includes 102 non-attainment cities***, across 23 states and Union territories, which were identified by Central Pollution Control Board (CPCB) on the basis of their ambient air quality data between 2011 and 2015.

✓ ***Non-attainment cities are those*** which have been consistently showing poorer air quality than the National Ambient Air Quality Standards. These include Delhi, Varanasi, Bhopal, Kolkata, Noida, Muzaffarpur, and Mumbai.

The plan proposes a three-tier system, including real-time physical data collection, data archiving, and an action trigger system in all 102 cities, besides extensive plantation plans, research on clean-technologies, landscaping of major arterial roads, and stringent industrial standards

➢ **Section 126 of the RP Act , 1951**

A Committee constituted to review and suggest modifications and changes in the provisions of ***the Section 126 and other sections of the RP Act 1951 and provisions of Model Code of Conduct*** has submitted its report. *The panel was headed by senior deputy election commissioner Umesh Sinha*.

Major Suggestions

✓ ***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.

- ✓ ***Amend Section 126(1) of R P Act*** to impose the "***campaign silence period***" on print, electronic media and intermediaries. The definition of intermediaries, as per Section 2(w) of the Information Technology Act, includes telecom service providers, internet service providers, web-hosting service providers, search engines, etc.
- ✓ ***Bring in changes in the model code of conduct*** to ensure that parties release their manifesto at least 72 hours prior to polling (or 72 hours prior to polling for first phase in a multi-phase election).
- ✓ ***Star campaigners should desist from addressing press conferences or giving interviews on election matters during silence period***.
- ✓ ***While EC will appoint an officer to liaise with the intermediaries, the latter should open a special grievance redressal channel for EC*** and have a dedicated team during election period to interface with and take quick action on receipt of EC order to take down or disable content in violation of R P Act.

Section 126 of the RP Act ***prohibits displaying any election matter by means, inter alia, of television or similar apparatus, during the period of 48 hours before the hour fixed for conclusion of poll in a constituency***.

➢ **National Youth Parliament Festival**

National Youth Parliament Festival 2019 has begun, thereby beginning the celebration of the ***National Youth Day 2019***(celebrated on 12th January, every year)

***Theme: "*Be The Voice of New India**" and "**Find solutions and contribute to policy**".

- ✓ ***Youth in the age bracket of 18-25 years are invited to participate*** in the District Youth Parliaments.
- ✓ The National Youth Parliament Festival will ***encourage the youth to engage with public issues, understand the common man's point of view, form their opinion and express these in an articulate manner***

➢ **Law Panel Favours Legalizing Gambling With Regulations**

- The Law commission report titled **Legal Framework: Gambling and Sports Betting including Cricket in India**, leaves the final call to Parliament and the state legislatures and recommends various ways to regulate the betting market.
- The report was triggered by the Supreme Court which, while considering the ***Lodha Committee report*** on cricket, asked the Commission to examine the issue
- Betting and gambling are state subjects. ***Goa and Sikkim*** have legalized many forms of betting and gambling.
- The Commission concluded that legalizing betting and gambling is not desirable in India in the present scenario. Therefore, the state authorities must ensure enforcement of a complete ban on unlawful betting and gambling. But it immediately adds that since a total ban isn't practical, regulation is a good approach provided the Parliament legalizes betting.

- **Aadhaar and Other Laws Amendment Bill -2018**

The Bill amends the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016, the Indian Telegraph Act, 1885, and the Prevention of Money Laundering Act, 2002.

Highlights of Bills

- ✓ ***Offline verification of Aadhaar number holder:*** The Bill allows 'offline verification' of an individual's identity, without authentication, through modes specified by the Unique Identification Authority of India (UIDAI) by regulations.
- ✓ ***During offline verification, the agency must*** (i) obtain the consent of the individual, (ii) inform them of alternatives to sharing information, and (iii) not collect, use or store Aadhaar number or biometric information.
- ✓ The Bill states that an individual may voluntarily use his Aadhaar number to establish his identity, by authentication or offline verification.
- ✓ ***Entities using Aadhaar:*** An entity may be allowed to perform authentication through Aadhaar, if the UIDAI is satisfied that it is (i) compliant with certain standards of privacy and security, or (ii) permitted by law, or (iii) seeking authentication for a purpose specified by the central government in the interest of the State.
- ✓ ***Aadhaar number of children:*** The Bill specifies that at the time of enrolling a child to obtain an Aadhaar number, the enrolling agency shall seek the consent of his parent or guardian. After attaining eighteen years of age, the child may apply for cancellation of his Aadhaar.
- ✓ ***Disclosure of information in certain cases:*** Under the Act, restrictions on security and confidentiality of Aadhaar related information do not apply in case the disclosure is pursuant to an order of a District Court (or above). The Bill amends this to allow such disclosure only for orders by High Courts (or above). The Bill also allows disclosure of information on directions of officers not below the rank of a Secretary.

Complaints: The Bill allows the individual to register complaints in certain cases, including impersonation or disclosure of their identity. The Bill defines the Aadhaar ecosystem to include enrolling agencies, requesting agencies, and offline verification-seeking entities. It allows the UIDAI to issue directions to them if necessary for the discharge of its functions under the Act

- **Article 35A**

The Supreme Court has said that it would take an ***"in-chamber" decision*** on listing of a petition challenging the constitutional validity of ***Article 35A***, which provides special rights and privileges to permanent residents of Jammu and Kashmir.

- ✓ ***'In-chamber' decision refers to*** *a process of decision making where the orders are issued from the Justice's chambers without a formal court proceeding*.
- ✓ Article 35A is a provision incorporated in the Constitution giving the Jammu and Kashmir Legislature a carte blanche to decide who all are ***'permanent residents' of the State and confer on them special rights and privileges*** in public sector jobs, acquisition of property in the State, scholarships and other public aid and welfare.
- ✓ The provision mandates that ***no act of the legislature coming under it can be challenged for violating the Constitution or any other law of the land***..

INDIAN ECONOMY

➢ **India registered highest average real wage growth during 2008-2017 in south Asia**

- Workers in **India got the highest average real wage growth (adjusted for inflation) in the last decade in southern Asia**, according to the **Global Wage Report 2018/19** published **by International Labour Organisation (ILO).**
- During 2008-17, **real wage growth in India stood at 5.5 per cent, highest among all the countries in southern Asia**.
- According to the report, **India and Pakistan had the highest gap of 34.5 per cent and 34 per cent respectively between what men and women earn**

➢ **India to Chair Kimberley Process from 1st January 2019**

- The **Kimberley Process Certification Scheme (KPCS)** Plenary 2018, was held in Brussels, Belgium, from 12th-16thNovember 2018. EU handed over the Chairmanship of KPCS to India from 1st January, 2019.
- **India is the founding member of KPCS and is actively involved in KP activities to ensure that almost 99% of the diamond trade in the world is conflict free**. Indians committed to maintain KP as an efficient and effective process in order to ensure the conflict diamond free status
- **India is at the forefront in addressing the issue of differentiation between Natural Diamonds and Lab Grown Diamonds** and ensure responsible business in this area.
- **This year was the fifteenth anniversary of KPCS**. Since its launch in 2003, the Kimberley Process has contributed **towards peace, security and prosperity.** It has proven to be an effective multilateral tool for conflict prevention in stemming the flow of conflict diamonds. **The Kimberley Process** has made valuable developmental impact in improving the lives of most people dependent on the trade in diamonds.

Kimberley Process: It is joint initiative of governments, industry and civil societies to stem flow of 'conflict diamonds', rough diamonds used by rebel groups to finance wars against legitimate governments. It is also described in United Nations Security Council (UNSC) resolutions. India is one of the founding members of KPCS.

➢ **Government Puts Gold Dore Imports Under Restricted Category**

- **Gold dore is a semi-pure alloy** which is refined for further purification. Refined gold bars are manufactured from gold dore bar.
- India, the world's second-biggest gold consumer after China, imports about 900 tonnes of gold a year.
- The restriction means, now, an importer needs a license to import this commodity.

➢ **WEF has released a report titled *Future of Consumption in Fast-Growth Consumer Market – India***.

Highlights of Report

- As per the report, domestic private consumption, that accounts for a major portion of India's gross domestic product (GDP), is expected **to develop into a $6 trillion growth opportunity** that would make India the world's third-largest economy by 2030. Currently it is at $1.5 trillion.

- If realised, **this would make India's consumer market, the third-largest in the world**, behind the U.S. and China.
- **The future of consumption in India in 2030 is anchored in rising incomes and a broad-based pattern of growth and benefit sharing**.
- **The growth of the middle class** would lift nearly 25 million households out of poverty and further, India would have 700 million millennials and Gen Z consumers, who have grown up in a more open and confident country.

➢ **First India ASEAN InnoTech Summit 2018 Held in New Delhi**

- The theme of India ASEAN InnoTech Summit was: Accelerating towards innovative development.
- It was organised by FICCI in association with the Department of Science & Technology (DST) and the Ministry of External Affairs to connect local and global research & development community for collaborative engagement.

ASEAN is regional intergovernmental organisation comprising **10 Southeast Asian** international locations, which encourages intergovernmental cooperation and facilitates financial, political, stability, military, educational, and sociocultural integration. **10-member ASEAN comprise of Indonesia, Malaysia, Thailand, Singapore, Philippines, Vietnam, Myanmar, Cambodia, Brunei and Laos. India is a total dialogue spouse of the ASEAN.**

➢ **Government of India and Asian Development Bank Sign $85 Million Loan to Support Odisha Skill Development Project**

- The Government of India and the Asian Development Bank (ADB) signed **a $85 million loan** to improve the **skill development eco-system in Odisha** and **establish an advanced skill training center, the World Skill Center (WSC**), in the state capital Bhubaneswar.
- The project will improve the quality of the **State's TVET programs** by making them relevant to industry and demand driven, and will impart advanced occupation-ready skills training aligned with international standards.
- The project will help over 150,000 people learn skills in priority sectors, including manufacturing, construction and services for formal employment.WSC will deliver eight training courses for 13,000 full-time students, provide training for 5,000 teachers, and train 1,000 assessors.

➢ **80th Session of Policy Commission Meet of World Customs Organisation(WCO) held in Mumbai, India**

- **WCO**, having **membership of more than 180 countries**, is the **only global organization which defines global standards and procedures** for customs clearances at the border and their implementation.
- It was established in 1952 as the Customs Co-operation Council (CCC) and is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations.
- **The second highest body is the Policy Commission**, which meets twice a year, once at the WCO headquarters at Brussels just before the Council Session and once in December, hosted by a member administration.

➢ **Indian IT opts for nearshoring due to stricter H-1B visa norms under Trump**

- Indian information technology (IT) services firms are increasingly looking at nearshoring options to service clients in the US as restrictive visa regulations in the country are making it increasingly difficult for them to depute engineers to this key client geography for meeting client requirements.
- **Nearshoring is an outsourcing model wherein IT firms establish delivery presence in countries and locations closer to the client geography** and depute employees working in those centres to service clients whenever there is a need.
- There has been an uptick in the investments being made in nearshoring, and Mexico, apart from Canada, has seen growing interest from Indian vendors.

➢ **Number of patents granted by India shot up by 50% in 2017 :WIPO Report**

- The patents granted by India increased from 8,248 in 2016 to 12,387 last year, the WIPO's World Intellectual Property Indicators 2018 report released in Geneva
- China's patent authority led the world in the number of patents granted with 420,144 and was followed by the US with 318,829, according to the WIPO.
- Japan's Canon ranked at the top with 24,036 patent applications during the years 2013-2015; South Korea's Samsung followed with 21,836 and China's State Grid Corporation with 21,653.

WIPO is the global forum for intellectual property services, policy, information and cooperation. It is a self-funding agency of the United Nations, with 191 member states. Its mission is to lead the development of a balanced and effective international intellectual property (IP) system that enables innovation and creativity for the benefit of all and is Governed by WIPO convention, 1967.

➢ **National Mission on Government e-Market (GeM) portal**

The objective of the Mission was to accelerate the adoption and use of Procurement by Major Central Ministries, States and UTs and their agencies (**including CPSUs/PSUs, Local Bodies**) on the GeM platform. The objectives of the NMG were to:

- Promote inclusiveness by catapulting various categories of sellers and service providers
- Highlight and communicate 'value add' by way of transparency and efficiency in public procurement, including corruption free governance.
- Achieve cashless, contactless and paperless transaction, in line with Digital India objectives.
- Increase overall efficiency leading to significant cost saving on government expenditure in Procurement.
- Maximizing ease in availability of all types of products and services bought by Government buyers.

GeM has brought transparency, efficiency, and inclusiveness in public procurement. It has reduced the time of procurements, reduced the process and enabled ease of doing business for both buyers and vendors. **There is huge savings in the cost of procurement, ranging from a minimum of 10% to 45% in different categories**

➢ **Govt's contribution to NPS hiked to 14%, more tax benefits for subscribers**

- . The government-sponsored pension scheme was launched in January 2004 for government employees but it was expanded for all sections in 2009.

- Subscribers are allowed to contribute regularly in a pension account during their working years; on retirement, subscribers can withdraw a part of the total amount in lump sum and use the remaining corpus to buy an annuity and secure a regular income after retirement
- Central government employees will be provided with **freedom of choice for selection of Pension Funds and pattern of investment.**
- **The entire withdrawal will now be exempt from income tax** as the tax exemption limit for lump sum withdrawal on exit has been enhanced to 60 percent.
- Any Indian citizen between **18 and 60 years** can join NPS. The only condition is that the person must comply with know your customer (KYC) norms.

➢ **States' Start Up ranking,2018**

- States have been identified as leaders across various categories such as Start-up policy leaders, incubation hubs, seeding innovation, scaling innovation, regulatory change champions, procurement leaders, communication champions, North-Eastern leader, and hill state leader.
- DIPP (Department of Industrial Policy and Promotion) began this exercise from January, 2016.
- **Best Performer**: Gujarat
- **Top Performers**: Karnataka, Kerala, Odisha, and Rajasthan
- **Leaders**: Andhra Pradesh, Bihar, Chhattisgarh, Madhya Pradesh, and Telangana
- **Aspiring Leaders**: Haryana, Himachal Pradesh, Jharkhand, Uttar Pradesh, and West Bengal
- **Emerging States**:Assam, Delhi, Goa, Jammu & Kashmir, Maharashtra, Punjab, Tamil Nadu, and Uttarakhand
- **Beginners**: Chandigarh, Manipur, Mizoram, Nagaland, Puducherry, Sikkim, and Tripura.

Fifty-one officers from States and Union Territories have **been identified as "Champions", who have made significant contributions towards developing their State's Start-up ecosystem.**

➢ **National Bench of the Goods and Service Tax Appellate Tribunal (GSTAT)**

Cabinet has approved creation of ***National Bench of the Goods and Services Tax Appellate Tribunal (GSTAT)***.

- ✓ It shall be **situated at New Delhi**.
- ✓ **Composition*:*** Presided over by its President and shall consist of one Technical Member (Centre) and one Technical Member (State).
- ✓ **It is the forum of 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.

➢ **Debt to GDP ratio of Centre and states**

The centre has released a Status Paper on Government Debt for 2017-18.

- ✓ ***The Centre's total debt as a percentage of GDP reduced*** to 46.5% in 2017-18 from 47.5% as of March 31, 2014.

- ✓ ***The total debt of the States has risen*** to 24% in 2017-18, and is estimated to be 24.3% in 2018-19.
- ✓ In absolute terms, the Centre's total debt increased from ₹56,69,429 crore at the end of March 2014 to ₹82,35,178 crore in 2017-18, representing a 45% increase. The total debt of the States increased from ₹24,71,270 crore to ₹40,22,090 crore over the same period, an increase of almost 63.

➢ **NITI Aayog 2.0**

In a paper titled ***'Towards India's New Fiscal Federalism'***, former Finance Commission chairman Vijay Kelkar has pitched for setting up of a ***'new Niti Aayog' and giving it responsibility for allocating capital and revenue grants to the states***.

- ✓ Replacing the Planning Commission, which was promoting regionally balanced growth in India, by the Niti Aayog, a think tank, ***has reduced the government's policy reach***. Therefore, the need has arisen for an institution ***to do the job at hand related to the structural issues including removal of regional imbalances in the economy***.
- ✓ **It 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)**.
- ✓ It 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.
- ✓ New **Niti Aayog will annually need the resources of around 1.5 to 2% of the GDP** to provide suitable grants to the states for mitigating the development imbalances.

➢ **Global Economy Watch Report**

Global Economy Watch report has been released by London based multinational professional services network- ***PricewaterhouseCoopers (PwC)***.

A look at India's economy in 2019 as per the report:

- ✓ **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.
- ✓ As per the report, **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** further realisation of efficiency gains from the newly adopted GST and policy impetus expected in the first year of a new government.

- **National Anti-Profiteering Authority (NAA)**

The **National Anti-Profiteering Authority (NAA) has been constituted under Section 171 of the Central Goods and Services Tax Act, 2017.**

- ✓ It is to **ensure the reduction in rate of tax** or the benefit of input tax credit is passed on to the recipient by way of commensurate reduction in prices.
- ✓ The National Anti-profiteering Authority (NAA) is the institutional mechanism under GST law to check the unfair profit-making activities by the trading community.
- ✓ The Authority's core function is to ensure that the benefits of the reduction is GST rates on goods and services made by GST Council and proportional change in the Input tax credit passed on to the ultimate consumers and recipient respectively by way of reduction in the prices by the suppliers.

- ***Fugitive Economic Offenders Act***

Vijay Mallya has become the first person to be declared a fugitive offender under the Fugitive Economic Offenders Act. The order was passed under Section 2F of FEOA against Mallya by the PMLA court.

- ✓ The decision comes against an application by the Enforcement Directorate before the special ***Prevention of Money Laundering Act (PMLA)*** court to classify Mallya as a fugitive economic offender.
- ✓ The investigative agency can now confiscate properties of Mallya which are not directly related to the cases against him.

- **The New Delhi International Arbitration Centre Bill-2018**

The Lok Sabha has passed the New Delhi International Arbitration Centre Bill to set up a revamped International Arbitration Centre at New Delhi with an aim to make India the hub of arbitration.

Highlights of Bills

- ✓ The Bill seeks to provide for the establishment of the NDIAC to conduct arbitration, mediation, and conciliation proceedings. **The Bill declares the NDIAC as an institution of national importance.**
- ✓ **The ICADR** is a registered society to promote the resolution of disputes through **alternative dispute resolution** methods (such as arbitration and mediation). The Bill seeks to transfer the existing ICADR to the central government.
- ✓ The **key objectives** of the NDIAC include (i) promoting research, providing training and organising conferences and seminars in alternative dispute resolution matters; (ii) providing facilities and administrative assistance for the conduct of arbitration, mediation and conciliation proceedings; (iii) maintaining a panel of accredited professionals to conduct arbitration, mediation and conciliation proceedings.

- **Womaniya on GeM**

It is ***an initiative launched by the Government eMarketplace (GeM) to enable women entrepreneurs and self-help groups to sell different products at the platform***.

Key Features of Initiative

- The initiative – **Womaniya on GeM** – seeks **to develop women entrepreneurship on the margins of society to achieve gender-inclusive economic growth**.

- The initiative would enable women entrepreneurs and women self-help groups **to sell handicrafts and handloom, jute and coir products, home décor and office furnishings, directly to various government ministries, departments and institutions.**

➢ **GST Council meeting and outcomes**

The ***GST Council*** in its recently held 32nd meeting took a slew of decisions aimed at reducing the tax and compliance burden on small and medium enterprises.

✓ ***The annual turnover limit*** under which companies would be exempt from GST has been raised to ₹40 lakh for most States and ₹20 lakh for the North Eastern and hill states, from the earlier limit of ₹20 lakh and ₹10 lakh, respectively

✓ ***The limit for eligibility for the Composition Scheme*** is raised to an annual turnover of ₹1.5 crore from April 1, 2019. So far, only manufacturers and traders were eligible for this scheme. The Scheme now has been extended to small service providers with an annual turnover of up to ₹50 lakh, at a tax rate of 6%.

✓ ***Kerala can levy a cess of up to 1% for up to two years*** on intra-State supplies to help finance the disaster relief efforts following the recent floods in the state.

➢ **Review of policy on Foreign Direct Investment (FDI) in e-commerce**

✓ The Department of Industrial Policy & Promotion recently issued a clarification to the existing rules pertaining to Foreign Direct Investment in e-commerce companies:

✓ Vendors that have any stake owned by an e-commerce company **cannot sell their products on that ecommerce company's portal.**

✓ Any vendor who purchases 25% or more of its inventory from an e-commerce group company will be considered to be controlled by that e-commerce company, and thereby barred from selling on its portal.

✓ **E-commerce firm** will not be allowed to influence the price of a product sold on its portal by giving incentives to particular vendors.

E-commerce companies can operate under **two different models in India:**

➢ The first is the **marketplace model** where the e-commerce firm simply acts as a platform that connects buyers and sellers. **FDI is allowed in e-commerce companies in this model.**

➢ The second model is **inventory-based** where the inventory of goods sold on the portal is owned or controlled by the e-commerce company. **FDI is not allowed under this model.**

The clarification seeks to ensure small players selling on the portals are not discriminated against in favour of vendors in which e-commerce companies have a stake.

BANKING & FINANCE

➢ **Arundhati Bhattacharya appointed SWIFT India Chairman**

- **SWIFT(Society for Worldwide Interbank Financial Telecommunication) India is a joint venture of top Indian public and private sector banks** The company was created to deliver high quality domestic financial messaging services to the Indian financial community.
- **The SWIFT is a global member-owned cooperative** that is **headquartered in Brussels**, Belgium. It was founded in 1973 by a group of 239 banks from 15 countries which formed a co-operative

utility to develop a secure electronic messaging service and common standards to facilitate cross-border payments.

- **What is Angel Tax controversy and why Income Tax Department are at start up door?**

- Over the past few weeks, several startups have reportedly been receiving notices from the I-T department asking them to clear taxes on the angel funding they raised, and in some cases, levying a penalty for not paying Angel Tax.
- **Angel Tax is a 30% tax that is levied on the funding received by startups from an external investor**. However, this 30% tax is levied when startups receive angel funding at a valuation higher than its '**fair market value'.**
- There is **no definitive or objective way to measure the 'fair market value' of a startup**. Investors pay a premium for the idea and the business potential at the angel funding stage.
- One of the reasons put forward by the Income Tax Department to send such notices is to get information for distinguishing the genuine startups from the bogus ones

- **Bimal Jalan to lead panel on RBI's economic capital framework(ECF)**

- The expert panel on RBI's economic capital framework has been **formed to address the issue of RBI reserves** and whether it can transfer its surplus to the government- one of the sticking points between the central bank and the government.
- **The Malegam Committee estimated the excess (in 2013) at Rs 1.49 lakh crore**
- The ECF committee will also suggest an adequate level of risk provisioning that the RBI needs to maintain. That apart, any other related matter, including treatment of **surplus reserves created out of realized gains, will also come within the ambit of this committee.**
- **The central bank's core reserve —contingency fund**—is only **around 7**% of its total assets and the rest of it is largely in revaluation reserves, which fluctuate with corresponding changes in currency and gold valuations

- **To connect with Direct Benefit Transfer (DBT), an online portal "ENSURE" has been launched**

- A portal ENSURE- National Livestock Mission-EDEG developed by NABARD and operated under the Department of Animal Husbandry, Dairying & Fisheries.
- Under the Mission's component **Entrepreneurship Development and Employment Generation** (EDEG), subsidy payment for activities related to poultry, small ruminants, pigs etc., through Direct Benefit Transfer (DBT) goes directly to the beneficiary's account

- **Survey on Retail Payment Habits of Individuals (SRPHi):**

- It is a survey launched by the Reserve Bank of India (RBI). The survey will capture payment habits of individuals in six cities, including four metropolitan towns.
- The survey will cover a sample of 6,000 individuals from various socio-economic backgrounds across six cities — Delhi, Mumbai, Kolkata, Chennai, Bengaluru and Guwahati.

The findings may provide some idea about awareness and usage habits of digital payment products

- **RBI allow tokenization of card transactions**

- The Reserve Bank of India has allowed **tokenization of debit, credit and prepaid card transactions** to enhance the safety of the digital payments ecosystem in the country.
- **The bank has offered permission for the process using all types of payment services and methods**, **including near-field communication (NFC), magnetic secure transmission (MST), in-app payment methods and cloud services**.
- **Tokenization will replace card details with a code, called a "token," which will be specifically for the card, the token requestor and the device being used to pay. Instead of the card's details**, the token will act as the card at point of sale (POS) terminals and quick response (QR) code payment systems. The goal of the process is to improve the safety and security of payments.

- **Aber- The New Digital Currency**

- The ***central banks of the United Arab Emirates (UAE) and Saudi Arabia*** have launched a common digital currency called 'Aber', which will be used in financial settlements between the two countries through Blockchains and Distributed Ledgers technologies.
- The use of the currency will be restricted to a limited number of banks in each state. In case that no technical obstacles are encountered, economic and legal requirements for future uses will be considered.

- **The Reserve Bank of India (RBI) has constituted a high-level committee under Nandan Nilekani to suggest measures to strengthen the safety and security of digital payments in the country. Terms of Refrence of the committee:**

- To encourage digitisation of payments and enhance financial inclusion through digitization.
- Reviewing the existing status of digitisation of payments in the country, identifying the current gaps in the ecosystem and suggesting ways to bridge them.
- Suggest a road map for increasing customer confidence and trust while accessing financial services through digital modes.
- Undertake cross-country analysis to identify best practices to accelerate digitisation of the economy and financial inclusion through greater use of digital payments.
- Suggest a medium-term strategy for deepening of digital payments.

- **Banks to Review MUDRA loan book**

The finance ministry has asked the banks ***to review all loans sanctioned under the Pradhan Mantri Mudra Yojana (PMMY or Mudra loan scheme)***, as the non-performing assets (NPA) have crossed Rs 11,000 crore within three years of the launch of the scheme.

- The rising NPAs under the scheme are a matter of concern. It is already three years and there is a need to review how the banks are sanctioning the loans. The RBI has already flagged its concerns regarding the bad loans to the government.
- In order to push the scheme, ***there had been an overemphasis on banks to meet loan disbursal targets***. In the race to meet the target, the credentials of loan-seekers were not being properly verified and in many instances, loans were being given without any collateral or security, making it difficult for the banks to go after defaulters.

Pradhan Mantri MUDRA Yojana

The PMMY Scheme was launched in April, 2015. The scheme's objective is ***to refinance collateral-free loans given by the lenders to small borrowers***.

- The scheme, which has a corpus of Rs 20,000 crore, can lend between Rs 50,000 and Rs 10 lakh to small entrepreneurs.
- Banks and MFIs can draw refinance under the MUDRA Scheme after becoming member-lending institutions of MUDRA.
- Mudra Loans are available for non-agricultural activities upto Rs. 10 lakh and activities allied to agriculture such as Dairy, Poultry, Bee Keeping etc, are also covered.
- Mudra's unique features include a Mudra Card which permits access to Working Capital through ATMs and Card Machines.

AGRICULTURE

➢ Kandhamal Haldi likely to get GI tag

- **Odisha's Kandhamal Haldi (turmeric), famous for its healing properties**, is a few steps away from receiving GI tag as the Geographical Indications under sub-section (1) of Section 13 of the **Geographical Indications of Goods (Registration and Protection) Act, 1999.**
- The tag, awarded by the India Patent Office, allows a state or a geographical region to lay an exclusive claim over a product, gives an assurance of quality, and is often used as a reason to increase product rates
- Turmeric is the main cash crop of tribal people in Kandhamal. Apart from domestic use, turmeric is also used for cosmetic and medicinal purposes.
- Last year(sep,2018) **Bihar's Shahi litchi received the geographical indication tag**. The fruit is mostly grown in Muzaffarpur and its neighbouring districts of East Champaran, Vaishali, Samastipur and Begusarai.
- The fruit is the fourth product from Bihar, **after Jardalu mango, Katarni rice and Magahi paan, to receive the status.**

A few other products with a geographical indication tag are **Darjeeling tea, Mahabaleshwar strawberry, Jaipur blue pottery, Banarasi sarees and Tirupati laddus, Alphonso Mango.**

➢ Cabinet approves Agriculture Export Policy, 2018

- In order to provide an impetus to agricultural exports, the Government has come out with a comprehensive "Agriculture Export Policy" aimed at doubling the agricultural exports and integrating Indian farmers and agricultural products with the global value chains.

Objectives of the Agriculture Export Policy are as under:

- **To double agricultural exports from present ~US$ 30+ Billion to ~US$ 60+ Billion by 2022 and reach US$ 100 Billion in the next few years** thereafter, with a stable trade policy regime.
- To diversify our export basket, destinations and boost high value and value added agricultural exports including focus on perishables.
- To promote novel, indigenous, organic, ethnic, traditional and non-traditional Agri products exports.
- To provide an institutional mechanism for pursuing market access, tackling barriers and deal with sanitary and phyto-sanitary issues.

- To strive to double India's share in world agri exports by integrating with global value chain at the earliest.
- Enable farmers to get benefit of export opportunities in overseas market.

➢ **Telangana shows an alternative to farm loan waivers**

- **Rythu Bandhu scheme**: The investment support programme launched in April provides financial assistance of ₹4,000 per acre per season to all land-owning farmers in Telangana.
- The way **farm loan waivers** are implemented, they turn out to be exclusive in nature at a time when farmers are bearing the burden of low food inflation , there is no better solution than to put money directly in their hands.
- Experts concur that compared to **farm loan waivers** or price support measures to pacify farmers' unions, income transfers are more equitable and do not impact either the banking ecosystem (leading to defaults by farmers and banks advancing lower volumes of fresh credit) or crop choices (like growing sugarcane in water-scarce **Maharashtra**).

➢ **Tribal ministry adds 17 new minor forest produce to the government's minimum support price scheme**

- The new **MFP(Minor Forest Produce**) under the scheme includes ***Mahua* flowers (dried), *Tejpatta* (dried) and Kokum (dry).**
- **In 2013-14, the government had for the first time declared MSP for MFP**, after years of demands by forest dwelling communities.
- In theory, an MSP is the minimum price set by the Government at which farmers can expect to sell their produce for the season. When market prices fall below the announced MSPs, procurement agencies step in to procure the crop and 'support' the prices.

➢ **10k Maharashtra villages to get "SMART"**

- The Government of Maharashtra has launched an ambitious project—**State of Maharashtra Agribusiness and Rural Transformation (SMART)—**in 10,000 villages within the next three years with an aim to achieve sustainable farming.
- **The project is to create and support the value chains in post-harvest segments of agriculture**, facilitate agribusiness investment, stimulate SMEs within the value chain, support resilient agriculture production systems, expand access to new and organized markets for producers and enhance private sector participation in the agribusiness.
- **SMART will be assisted by the World Bank**. Amongst the corporate houses that have pledged support include Reliance Retail, Amazon, Walmart, Mahindra Agro, PepsiCo, Tata Rallis, Big Basket, Patanjali, Tata Chemical, Happy Roots, Mera Kisan, Way Cool and others.

➢ **Food and Agriculture organisation (FAO) Council approves India's proposal to observe an International Year of Millets in 2023**

- This international endorsement comes in the backdrop of India celebrating 2018 as the National Year of Millets for promoting cultivation and consumption of these nutri-cereals.

- In addition, the FAO Council also approved India's membership to the Executive Board of the **United Nations World Food Program (WFP)** for 2020 and 2021.
- **The WFP** is the food-assistance branch of the United Nations. It is the world's largest humanitarian organization addressing hunger and promoting food security. It works to help people who cannot produce or obtain enough food for themselves and their families.
- **WFP was established in 1961** after the 1960 Food and Agricultural Organization (FAO) Conference

➢ **Odisha govt announces Rs 10,180 crore (KALIA) scheme for development of farmers**.

- **Krushak Assistance for Livelihood and Income Augmentation(KALIA) scheme**, worth Rs. **10,180 crore**, for the development of farmers in the state
- As per the scheme, an amount of **Rs. 10,000 per family at the rate of Rs. 5,000 each** for **Kharif and Rabi seasons** shall be provided as financial assistance for taking up cultivation for five cropping seasons **between 2018-19 and 2021-22(a period of 3 years)**
- The scheme also has a component for livelihood support for landless households. **The scheme also includes life insurance cover** of Rs. 2 lakh and additional personal accident cover of Rs. 2 lakh will be provided to both cultivators and landless agriculture labourers.

➢ **Atal Solar Krishi Pump Yojana**

- To reduce losses due to non-payment of electricity bills and also promote solar energy, ***Maharashtra state government has launched Atal Solar Krishi Pump Yojana***.
- Under the scheme, the government of Maharashtra has decided **to give two LED bulbs, a DC fan and a mobile charging socket as freebies to farmers**.
- The scheme provides **a subsidy of up to 95% on solar pumpsets**. The State plans to install one lakh solar pumps

➢ Parliament's committee on estimates has in its latest report called for re-formulation of the ***Pradhan Mantri Fasal Bima Yojana (PMFBY)***, seeking transparency in its working and asking for more financial allocations to attract increasing participation from farmers. The committee has observed that ***there are fundamental flaws in the design of the scheme that renders it rather ineffective***.

Challenge at present

- *Insufficient reach and the issue of penetration*
- *Data constraints*
- *Low payout of claims*
- *Gaps in assessment of crop loss*
- *Less number of notified crops*
- *High actuarial premium rates*
- *PMBY is not beneficial for farmers in vulnerable regions*

Pradhan Mantri Fasal Bima Yojna

In April, 2016, the government of India had launched Pradhan Mantri Fasal Bima Yojana (PMFBY) ***after rolling***

back the earlier insurance schemes viz. National Agriculture Insurance Scheme (NAIS), Weather-based Crop Insurance scheme and Modified National Agricultural Insurance Scheme (MNAIS).

- ✓ It envisages a uniform premium of only 2% to be paid by farmers for Kharif crops, and 1.5% for Rabi crops. The premium for annual commercial and horticultural crops will be 5%.
- ✓ ***The scheme is mandatory for farmers who have taken institutional loans from banks***. It's optional for farmers who have not taken institutional credit.

INDUSTRY

➢ FAME-India Scheme

- **In order to promote manufacturing of electric and hybrid vehicle technology** and to ensure sustainable growth of the same, **Department of Heavy Industry is implementing FAME-India Scheme**- Phase-I [Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India] from 1st April 2015. The scheme, which was initially upto 31st April 2017, has been **extended upto 31st March, 2019 or till Notification of FAME-II, whichever is earlier.**
- Phase-II of the Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME-India) Scheme proposes to give a push to electric vehicles (EVs) in public transport and seeks to encourage adoption of EVs by way of market creation and demand aggregation. **The draft scheme envisages the holistic growth of EV industry, including providing for charging infrastructure, research and development of EV technologies and push towards greater indigenizati**on.

➢ National Medical Devices Promotion Council to be set up under DIPP

- To give a fillip to the medical device sector, which is a sunrise sector, Govt. announced setting up of a **National Medical Devices Promotion Council under the Department of Industrial Policy and Promotion (DIPP)** in the Ministry of Commerce & Industry.
- Although the industry has been growing in double digits but is predominantly import-driven with imports accounting for over 65% of the domestic market.
- The Council will be headed by Secretary, DIPP. Apart from the concerned departments of Government of India, it will also have representatives from health care industry and quality control institutions. **Andhra Pradesh MedTech Zone, Visakhapatnam, will provide technical support to the Council.**
- **Sunrise industry is a colloquial term for a burgeoning sector or business that is just in its infancy but shows promise of a rapid boom**. A sunrise industry is typically characterized by high growth rates, numerous start-ups and an abundance of venture capital funding.
- Examples of sunrise industries include alternative energy in the period from 2003 to 2007, as well as social media and cloud computing in 2011 and 2012, Space Tourism in the present times etc.

➢ Establishment of NIMZs

- National Investment & Manufacturing Zones (NIMZs) are one of the important instruments of National Manufacturing Policy, 2011. NIMZs are envisaged as large areas of developed land with the requisite eco-system for promoting world class manufacturing activity. So far, three NIMZs namely Prakasam (Andhra Pradesh), Sangareddy (Telangana) and Kalinganagar (Odisha) have been accorded final approval and 13 NIMZs have been accorded in-principle approval. Besides these, eight Investment Regions along the Delhi Mumbai Industrial Corridor (DMIC) project have also been declared as NIMZs.

- **The main objective of Special Economic Zones** is **promotion of exports**, while NIMZs are based on the principle of industrial growth in partnership with States and focuses on **manufacturing growth and employment generation**. NIMZs are different from SEZs in terms of size, level of infrastructure planning, governance structures related to regulatory procedures, and exit policies.

➢ **Digital Sky Platform launched – India to start registration of drones, pilots, and operators Registration portal for online permission**

- For drones of micro size and above categories, operators are required to register on the Digital Sky portal. Nano drones can start flying legally now.
- The digital platform has begun accepting registrations of users, and payments for **Unmanned Aerial Operator's Permit (UAOP) and Unique Identification Numbers (UIN) will be accepted through the Bharat Kosh portal (bharatkosh.gov.in).**
- To get the permission to fly, RPAS (remotely piloted aerial system) or drone operators or remote pilots will have to file a flight plan.
- Flying in the **'green zones'** will require only intimation of the time and location of the flights via the portal or the app. Permissions will be required for flying in **'yellow zones'** and flights will **not be allowed in the 'red zones'**
- To prevent unauthorised flights and ensure public safety, any drone without a digital permit will not be able to take off.
- The Digital Sky Platform is the first-of-its-kind national **unmanned traffic management** (UTM) platform that **implements "no permission, no takeoff" (NPNT).**
- The UTM operates as a traffic regulator in the drone airspace and coordinates closely with the defence and civilian air traffic controllers (ATCs) to ensure that drones remain on the approved flight paths

➢ **One District, One Product Regional Summit held**

- **The One District, One Product** Regional Summit was held at Deendayal Hastakala Sankul (**Trade Facilitation Centre & Crafts Museum**) in **Varanasi.**
- **'One District One Product' (ODOP) scheme of the Uttar Pradesh Government** is aimed at **enhancing the skills of local people** and increasing the reach of the indigenous trades, crafts and products from small towns and small districts in the state.
- Under the ODOP scheme, the state government has set a goal of providing **employment to 25 lakh people in five years** through the financial assistance of Rs 25,000 crores.
- **ODOP is basically a Japanese business development concept**, which **gained prominence in 1979**. It is aimed at **promoting a competitive and staple product** from a specific area to push sales and improve the standard of living of the local population.

➢ **'Size India' Project**

The ***Clothing Manufacturers Association of India (CMAI)*** will work with the **Union Ministry of Textiles in the "Size India" project**.

- ✓ The **'Size India'** project will ***help create a India-specific size chart for the textiles and garment industry***.
- ✓ ***Aim:*** To arrive at standard Indian sizes for apparels.
- ✓ The project will reduce overall prices and the consumers will stand to benefit from it
- ✓ It will create database of measurements that will result in standardized size chart which is representative of Indian population and can be adopted by apparel industry.

INFRASTRUCTURE

➢ Indian Ports Association Launches 'PCS 1x' to Increase Ease of Doing Business

- **'PCS 1x' is a cloud based new generation technology**, with user-friendly interface. This system **seamlessly integrates 8 new stakeholders besides the 19 existing stakeholders from the maritime trade on a single platform**.
- The platform offers value added services such as notification engine, workflow, mobile application, track and trace, better user interface, better security features, improved inclusion by offering dashboard for those with no IT capability.
- **A unique feature of 'PCS1x' is that it can latch on to third party software which provides services to the maritime industry** thereby enabling the stakeholders to access wide network of services.
- The system enables single sign on facility to provide one stop interface to all the functionalities across all stakeholders. Another major feature is the deployment of a world class state of the art payment aggregator solution which removes dependency on bank specific payment eco system.

Indian Ports Association (IPA): IPA was constituted in 1966 under Societies Registration Act, with the idea of fostering growth and development of all Major Ports which are under the supervisory control of Ministry of Shipping.

➢ BHARATMALA PROJECT

- The National Highways Authority of India (NHAI) plans to raise Rs10,000 crore through Bharatmala Taxable Bonds in the ongoing financial year.
- Bharatmala Project is the second ***largest highways construction project in the country since NHDP***, under which almost 50,000 km or highway roads were targeted across the country. Bharatmala will look to improve connectivity particularly on economic corridors, border areas and far flung areas with an aim of quicker movement of cargo and boosting exports.

➢ **Transport Subsidy Scheme**

To facilitate the process of industrialization in hilly, remote and inaccessible areas, transport incentive is provided to the states of:

- North Eastern Region (including Sikkim) under North Eastern Industrial Development Scheme (NEIDS) – 2017
- Jammu & Kashmir under Industrial Development Scheme – 2017
- Lakshadweep and A&N Islands under Lakshadweep and Andaman & Nicobar Island Development Scheme – 2018
- Under the above mentioned schemes, **all eligible industrial units can avail incentive on transportation of only finished goods through Railways or the Railway Public Sector Undertakings, Inland Waterways or scheduled airline** (shipping for Andaman & Nicobar and Lakshadweep islands also) for five years from the date of commencement of commercial production/operation.

➢ **Centre gives nod to develop a Rs 156 crore freight village in Varanasi**

- The Ministry of Shipping has approved the development of a Rs 156 crore freight village in Varanasi adjoining the Inland Waterways Terminal on River Ganga.
- A freight village is a designated area where facilities for various modes of transportation, distribution of goods and other logistics are available in a synchronised manner on a large scale.
- The Varanasi freight village will be developed by the Inland Waterways Authority of India (IWAI**)**
- The city is located strategically and is a focal point in the logistics chain of Eastern Transport Corridor of the country where the **National Waterways-1, Eastern Dedicated Freight Corridor (EDFC), National Highway-7 and National Highway-2 pass** through.

➢ **The Bogibeel bridge is India's longest railroad bridge(On Brahmaputra)**

- The **4.98 km-long bridge** is situated 17 km downstream of Dibrugarh and Dhemaji. It crosses the Brahmaputra river and will connect Assam's Dibrugarh town with Dhemaji.
- Located 20 km away from the Assam-Arunachal Pradesh border, the bridge is expected to act as an alternative to the Kolia Bhomora Setu in Tezpur.
- Built at a cost of around Rs 5,920 crore, the bridge is India's longest rail cum road bridge which is based on the **design of Oresund bridge that connects Sweden and Finland across the Oresand strait**.
- The **Bogibeel project was a part of the 1985 Assam Accord** and was sanctioned in 1997-98.

➢ **"The Future of Rail " Report**

"The Future of Rail" Report *has been released by* ***the International Energy Agency (IEA).***

It ***examines how the role of rail in global transport might be elevated as a means to reduce the energy use and environmental impacts*** associated with transport.

Highlights of Report

- Rail is among the most energy efficient modes of transport for freight and passengers – **while the rail sector carries 8% of the world's passengers and 7% of global freight transport, it represents only 2% of total transport energy demand**.
- Today**, three-quarters of passenger rail transport activity takes place on electric trains,** which is an increase from 60% in 2000 – the rail sector is the only mode of transport that is widely electrified today. This reliance on electricity means that the rail sector is the most energy diverse mode of transport.
- The regions with the **highest share of electric train activity are Europe, Japan and Russia, while North and South America still rely heavily on diesel**.
- Most conventional rail networks today are located in North America, Europe, China, Russia, India, and Japan. These regions make up about 90% of global passenger movements on conventional rail with India leading at 39%, followed by China at 27%.

➢ **Gangajal Project**

The Prime Minister Narendra Modi inaugurated the **Gangajal Project**. The project aims to **improve water supply to the city of Agra**.

✓ Gangajal project, which will provide Agra with better and more assured water supply, at an estimated cost of Rs.2880 crores.

✓ Gangajal project aims to bring 140 cusecs of Ganga water to Agra. This will help meet the drinking water demands in the city.

➢ **Green Technology in PMGSY**

✓ In order to **encourage locally available materials and use of green technologies for construction of road** under Pradhan Mantri Gram Sadak Yojana (PMGSY), guidelines were issued by the Ministry.

✓ Pradhan Mantri Gram Sadak Yojana (PMGSY) encourages the use of 'Green Technologies' and non-conventional materials like waste plastic, cold mix, geo-textiles, fly-ash, iron and copper slag etc in rural roads.

✓ The **Ministry of Rural Development specifications have also been relaxed in respect of grading of materials for Granular Sub Base layer** in order to encourage the usage of locally available/naturally occurring material/marginal materials.

➢ **Renuka Dam**

The Centre has signed an agreement with Chief Ministers of five States — Uttar Pradesh, Rajasthan, Uttarakhand, Delhi, Himachal Pradesh — to restart construction of the Renuka multipurpose dam project in the Upper Yamuna Basin.

✓ The Renuka dam project has been conceived as ***a storage project on the Giri river (a tributary of the Yamuna)*** in Sirmaur district of Himachal Pradesh.

✓ The project envisages making a 148-metre-high dam for supplying water to Delhi and other basin States. It will also generate 40 MW of power.

✓ Around 90% of the cost of irrigation/drinking water component of the project i.e. ₹3,892.83 crore will be provided by the Central government and the remaining ₹432.54 crore by the rest of the basin States.

- ***Pradhan Mantri Awas Yojana- Gramin (PMAY-G)***

As per the latest study conducted by the Rural Development Ministry, the ***Pradhan Mantri Awas Yojana- Gramin (PMAY-G)*** is in doldrums with over 12 lakh pending houses and land being provided to only 12 per cent of the beneficiaries even as the March 1 deadline for 1 crore houses fast approaches.

- ✓ Of the total 4.72 lakh beneficiaries identified across the country, only 56,694 have been allotted land.
- ✓ Among the best performing states in terms of land allotment are Sikkim, Madhya Pradesh and Uttar Pradesh.
- ✓ States like Goa, Kerala and West Bengal have drawn a blank in terms of allotment of land to beneficiaries.

- **Cost sharing*:*** The cost of unit assistance in this scheme is shared between Central and State Governments in the ratio 60:40 in plain areas and 90: 10 for North Eastern and Himalayan States.
- ***Selection of beneficiaries*** under Pradhan Mantri Awaas Yojana-Gramin (PMAY-G) is based on housing deprivation parameters of Socio-Economic and Caste Census (SECC), 2011, subject to 13 point exclusion criteria, followed by Gram Sabha verification

Pradhan Mantri Awas Yojana- Gramin (PMAY-G)

- The erstwhile rural housing scheme **Indira Awaas yojana (IAY) has been restructured into Pradhan Mantri Awaas Yojana –Gramin (PMAY-G)** from 01.04.2016.
- **PMAY-G aims at providing a pucca house, with basic amenities, to all houseless householder and those households living in kutcha and dilapidated house, by 2022**.

- **Global Housing Technology Challenge**

Government has launched the ***Global Housing Technology Challenge***. The challenge is ***undertaken under the Pradhan Mantri Awas Yojana Urban (PMAY-U)***.

- ✓ GHTC aims **to fast-track the construction of affordable housing and meet the target of constructing 1.2 crore houses by 2022**.
- ✓ GHTC **focuses on identifying and mainstreaming proven demonstrable technologies for lighthouse projects and spotting potential future technologies for incubation and acceleration support through ASHA (Affordable Sustainable Housing Accelerators) — India.**

- **Indian Railways' Train 18**

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 and Varanasi at a maximum speed of 160 kmph.**
- ✓ The train is a **100% 'Make in India' project** and is claimed to be built at half the cost of a similar train set that is imported.
- ✓ **T-18 is a self-propelled engine-less train** (similar to the Metro trains) and is energy-efficient as its coaches will be fitted with LED lights. Coaches will have automatic doors and retractable footsteps.

➢ **Centre approves Shahpurkandi Dam project on river Ravi in Punjab**

- The Union Cabinet gave its nod to the implementation of **Shahpurkandi Dam project in Punjab on the river Ravi in an attempt to minimise wastage of water of the river,** which currently flows downstream to Pakistan. And, utilise the water in Punjab and Jammu and Kashmir.
- On completion, the project has an irrigation potential of 5,000 hectares in Punjab and 32,173 hectares in Jammu and Kashmir. Punjab would also be able to generate 206 MW of hydro-power
- The project would be implemented by the **Punjab govt** and would be completed by June 2022.
- A bilateral agreement was signed between **Punjab** and Jammu and Kashmir in January, 1979. As per the agreement, construction of **Ranjit Sagar Dam (Thein Dam) and Shahpurkandi Dam was to be taken up by the Punjab government and the dam was commissioned in August 2000.**
- It may be noted that the Indus Waters Treaty was signed between India and Pakistan in 1960 for sharing of Indus waters. According to the treaty, India got the full rights for utilization of waters of the three eastern **Rivers** namely Ravi, Beas and Sutlej.

➢ **India's first rail university and world's third to be dedicated to the nation.**

- **The National Rail and Transportation Institute (NRTI), a university in Vadodara, Gujarat** is the **third in the world after Russia and China**. The university opened its doors to the first batch of 103 students from 20 states in two fully-residential undergraduate courses in September,2018.
- The university had started two under-graduate programmes -- BSc in Transportation Technology and BBA programme in Transportation Management in September 2018.
- This year, the university is aiming to start a **Masters programme from 2019-20 academic session in areas such as Transportation and Systems Design, Transport Systems Engineering, Transport Policy, and Economics.**

HUMAN RESOURCE DEVELOPMENT

➢ **NITI Aayog to Release Second Delta Ranking under the Aspirational Districts Programme**

- The ranking details the incremental progress achieved by the districts during June to October,2018 across six key development sectors.
- The districts have been ranked in a transparent basis **on parameters across various performance indicators like Health and Nutrition, Education, Skill Development and Basic Infrastructure among others**.
- based on the data that is publicly available through the Champions of Change Dashboard, which includes data entered on a real-time basis at the district level.

Performers:

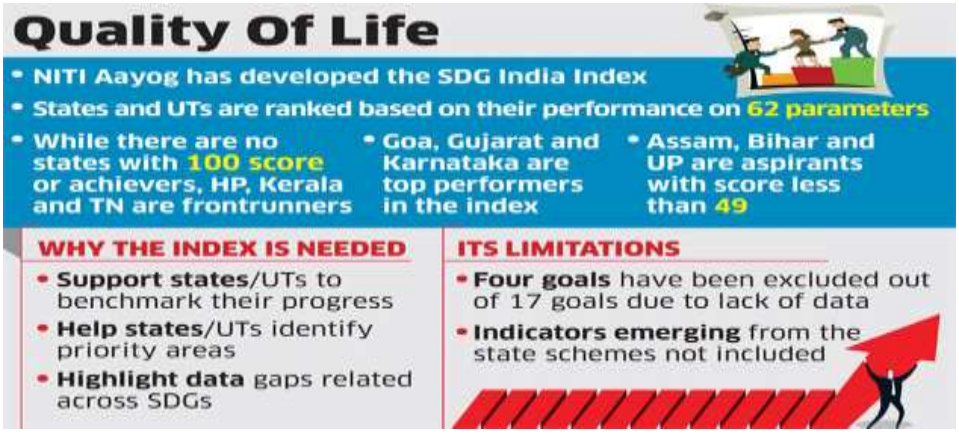
✓ Virudhunagar district in Tamil Nadu has shown the most improvement overall, followed by Nuapada district in Odisha.

✓ Nagaland's Kiphire district, Jharkhand's Giridih, Chatra in Jharkhand, Hailakandi in Assam, and Pakur in Jharkhand have shown least improvement.

Launched in January last year, the **'Transformation of Aspirational Districts'** programme aims to quickly and effectively transform some of the **most underdeveloped districts of the country.**

For details refer to the Quick Revision For Prelims(Jun-Nov,2018)

➢ **NITI Aayog Releases SDG India Index: Baseline Report 2018**



- The *SDG India Index*, which was developed in collaboration with the Ministry of Statistics & Programme Implementation (MoSPI), Global Green Growth Institute and United Nations in India which comprehensively documents the progress made by India's States and Union Territories towards implementing the 2030 SDG targets.
- NITI Aayog has the twin mandate to oversee the implementation of SDGs in the country, and also promote Competitive and Cooperative Federalism among States and UTs.
- The SDG India Index tracks progress of all States and UTs on 62 Priority Indicators selected by NITI Aayog, which in turn is guided by MoSPI's National Indicator Framework comprising 306 indicators and based on multiple-round consultations with Union Ministries/Departments and States/UTs.

➢ **One Family One Job scheme**

Sikkim has announced the ***One family one job scheme*** to provide employment to the youth of Sikkim.

- One family one job scheme entitles **one government job for every family in the state**.
- **Eligibility:** Only members of those families which do not have a government job at present are eligible for government employment under the scheme.
- The government has announced that **the nature of the job** is not temporary and would be regularised after five years.
- ***Sikkim is the first state in the country to launch an exclusive programme which entitles every family in the state with a government job*** and Sikkim earmarks 70% of its revenues towards salaries for state government employees.

➢ **Sikkim's ruling party, the Sikkim Democratic Front (SDF),** recently **declared to include the Universal Basic Income scheme in its manifesto ahead of the Assembly election in 2019** and aims to implement it by 2022. If everything goes according to the plan, ***it will be the first state to implement UBI in India.***

Universal Basic Income

- ✓ Universal Basic Income (UBI) is a programme for providing all citizens of a country or other geographic area/state with a given sum of money, regardless of their income, resources or employment status.
- ✓ The main idea behind UBI is ***to prevent or reduce poverty and increase equality among citizens***. The essential principle behind Universal basic income is the idea that all citizens are entitled to a livable income, irrespective of the circumstances they're born in.

- **Project Reweave**

- Microsoft India has launched ***a new e-commerce platform 're-weave.in' under project ReWeave to help handloom weavers***.
- 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

- **NITI Aayog Organises the Third Edition of the Women Transforming India Awards**

- **The NITI Aayog organised the Third Edition of the Women Transforming India Awards 2018 in collaboration with United Nations**, and launched the upgraded portal of the Women Entrepreneurship Platform. 15 winners selected from sectors such as Renewable Energy, Education, Sanitation, Art and Culture, Social Innovation and Impact to name a few.
- The Women Transforming India Awards were instituted, in collaboration with United Nations, to recognise and celebrate stories of exemplary women from across India.
- On November 28-30, 2017, NITI Aayog, Government of India in partnership with the Government of the United States of America hosted the 8th Annual Global Entrepreneurship Summit (GES) in Hyderabad, India with the overarching theme of 'Women First, Prosperity for All'. To take the idea forward, CEO, NITI Aayog announced setting up of Women Entrepreneurship Platform (WEP) to promote and support established as well as aspiring women entrepreneurs in India.

- **EU(European Union) strategy paper to strengthen ties with India**

- For long, India-EU ties have been guided by the economic relationship, but the India strategy has come after 14 years — last such strategy was put in place in 2004. This will now be discussed in the European Parliament and the European Council.
- Develop military-to-military relations, consider deploying an EU military advisor in the EU Delegation in New Delhi and vice-versa, consider negotiation of a broader Strategic Partnership Agreement, intensify dialogue on Afghanistan and Central Asia, strengthen technical cooperation on fighting terrorism, countering radicalisation, violent extremism and terrorist financing — these are some of the key proposed actions in the European Union strategy on India.

- **2018 G-20 Summit Meeting: Buenos Aires**

Key Outcomes:

- U.S. President Donald Trump and China's President Xi Jinping agreed to start trade negotiations and stop escalation of the ongoing trade war.
- Trump cancelled a meeting with Russian President Vladimir Putin to protest Russia's attack on Ukraine.
- Trump signed the new NAFTA agreement with Mexico and Canada.
- All countries except the United States reaffirmed their commitment to the **Paris Climate Accord.**

The G-20 members include the G-7 nations: Canada, France, Germany, Italy, Japan**, the UK and the United States. This group of countries also meets on their own.** There are eleven emerging market and smaller industrialized countries. They are Argentina, Australia, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, South Korea and Turkey. The **EU is also a member of the G-20.**

The G-20's primary mandate is to prevent future international financial crises. It seeks to shape the global economic agenda. The finance ministers and central bank governors of the G-20 countries meet twice a year. They meet at the same time as the International Monetary Fund and the World Bank.

- **Qatar to leave OPEC in January 2019**

- The **withdrawal decision reflects Qatar's desire** to focus its efforts on plans to develop and **increase its natural gas production from 77 million tons per year to 110 million tons in the coming years.**
- OPEC currently has **15 members**: Algeria, Angola, Congo, Ecuador, Equatorial Guniea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela**.**
- **Qatar, the smallest OPEC Member Country in terms of both area and population**, is not the first nation to leave OPEC, but it is the first Middle Eastern nation to leave it**.**
- Previously, **Ecuador**, which had joined in 1972, suspended its membership in December 1992. It **rejoined in October 2007.**
- **Indonesia suspended its membership in January 2009, reactivated it again in January 2016, but decided to suspend its membership once more at the 171st Meeting of the OPEC**

Conference on 30 November 2016. **Gabon** terminated its membership in January 1995. It then **rejoined the cartel in July 2016.**

- The **Organization of the Petroleum Exporting Countries** is an intergovernmental **organisation of 14 nations, founded in 1960 in Baghdad by the first five members (Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela)**, and **headquartered since 1965 in Vienna, Austria**.
- The stated mission of the organisation is to "coordinate and unify the petroleum policies of its member countries and ensure the stabilization of oil markets, in order to secure an efficient, economic and regular supply of petroleum to consumers, a steady income to producers, and a fair return on capital for those investing in the petroleum industry."

➢ **Who are the gilets jaunes and what do they want? : Yellow Vests Movement(France)**

Who are the gilets jaunes?

- A grassroots citizens' protest movement began in early November,2018 **against a planned rise in the tax on diesel and petrol,** which Emmanuel Macron insisted would aid the country's transition to green energy.
- The movement was named "*gilets jaunes*" **(yellow vests) because protesters wear the fluorescent yellow high-visibility jackets that all motorists must by law carry in their cars.**
- Unlike previous French protest movements, it **sprang up online through petitions** and was **organised by ordinary working people** posting videos on social media, without a set leader, trade union or political party behind it.

Who are the protesters and what are their grievances?

Protesters have largely come from peripheral towns, cities and rural areas across France and include many women and single mothers. Most of the protesters have jobs, including as secretaries, IT workers, factory workers, delivery workers and care workers. All say their low incomes mean they cannot make ends meet at the end of the month.

The movement is predominantly against a tax system perceived as unfair and unjust, but there are numerous grievances and differences of opinion

➢ **India calls for constructive engagement to review OPCW**

- At the Fourth Special Session of the Conference of the States Parties India called for constructive engagement, dialogue and unity of purpose to reviewing the Operation of the Chemical Weapons (OPCW) Convention**.**
- As a founding member of OPCW, India has always emphasised the importance of the principle of consensus enshrined in the Convention and the need for decisions to be taken by the States Parties in consultation with each other.

For **details on OPCW** refer to the **Quick Revision for Prelims(Jun-Nov,2108)**

➢ **Karmapa now a Dominican citizen**

- The 17th Karmapa, Ogyen Trinley Dorje, who has been out of India since May 2017, has taken the citizenship and passport of Dominica, a Caribbean island country.
- **The Karmapa is the head of the Karma Kagyu school, one of the four main schools of Tibetan Buddhism and is based at Dharamsala in Himachal Pradesh**.

- Ogyen Trinley Dorje is of the Karma Kagyu sect and the seat of the Karmapa is in the Rumtek monastery in Sikkim.
- The Karma Kagyu lineage belongs to one of the ***4 main schools of Tibetan Buddhism***. As a lineage of direct oral transmission it places particular emphasis on meditation and the realization of the direct experience of mind gained through the guidance of a teacher.

➢ **India hands over first 50 houses built for Rohingya refugees in Myanmar**

- India signed a development programme **for Rakhine State in Myanmar** which was designed to assist the Myanmar government in Rakhine State to build housing infrastructure for displaced persons**.**
- **Rohingyas are an Ethnic group, mostly Muslims. They were not granted full citizenship by Myanmar. They were classified as "resident foreigners or associate citizens". They speak a dialect of Bengali and not Burmese. Ethnically they are much closer to Indo-Aryan people of India and Bangladesh than to the Sino-Tibetans of the Country.**

➢ **Britain's 'Golden Visas'**

- **Also known as Tier 1 Visas** They provide a faster route for wealthy investors coming from outside the European Union and Switzerland to settle in Britain. The program was introduced in 2008 to attract wealthy foreign nationals willing to invest large amounts of capital in Britain.
- **A golden visa is a permanent residency visa issued to individuals who invest**, often through the purchase of property, a certain sum of money into the issuing country.Depending on the sum of investment, the benfits are provided,.
- As India does not allow dual citizenship, many Indians opt for residence-by-investment schemes.

➢ **India signs ascension pact to the thirty member T-RMN**

- India has inked the ascension agreement to the **Trans Regional Maritime Network (T-RMN)** which **facilitates information exchange on the movement of commercial traffic on the high seas** and will contribute to increased maritime domain awareness.
- The multilateral construct comprises of 30 countries and is steered by Italy. The information is available primarily through the Automatic Identification System (AIS) which are **fitted on merchant ships with more than 300 Gross Registered Tonnage as mandated by the International Maritime Organisation.**

White Shipping Agreement is a technical term related to the exchange agreement between the navies of countries on the non –military commercial ships on each others' oceanic territories. There is a particular color code for ships. **white is the color code for commercial ships**, gray is the color for military vessels and illegal ships are coded as black. **Indian Navy's Information Management and Analysis Centre (Gurgaon)** is the model center for white shipping agreement.

➢ **Yemen: ceasefire agreed for port city of Hodeidah**

- Yemen's warring parties have agreed to an immediate ceasefire in the **Red Sea port of Hodeidah,** the agreement included the future deployment of UN-supervised neutral forces and the establishment of humanitarian corridors.

- If implemented on the ground, the deal would represent a breakthrough because the port is the gateway for the bulk of humanitarian aid coming into the country, and has been the subject of intense fighting. Ceasefires have also been agreed at two other ports, Salif and Ras Issa**.**
- The **UN-backed Yemeni government lost control of Hodeidah** and Sana'a to **Iranian-backed Houthi rebels in 2015**. Despite heavy military support from Saudi Arabia and the United Arab Emirate, the government, which is based in Aden, has been unable to take back either city.
- Yemen's capital has been held since 2014 by Houthi rebels who drove the government out and seized a string of ports. The Yemeni government, now based in the southern port city of Aden, has fought to push back the rebels with support from a military coalition led by Riyadh and the UAE.

➢ **India-Korea CEPA: Harvest deal by 2019 even as two nations stick to guns**

- South Korea imports around 15 lac tones of raw sugar annually and the Indian sugar industry is making efforts to export raw sugar from India during 2018-19 sugar seasons.
- India and South Korea will reduce duties on 11 tariff lines in a bid to expand bilateral trade by updating their existing free-trade agreement, called the **Comprehensive Economic Partnership Agreement (CEPA).**
- The major "technical" difference between a CECA and CEPA is **that CECA involve only "tariff reduction/elimination in a phased manner** on listed/all items except the negative list and tariff rate quota (TRQ) items**. CEPA also covers the trade in services and investment and other areas of economic partnership.**

➢ **UN Global Counter-Terrorism Coordination Compact'**

- The United Nations has launched a new framework titled **'UN Global Counter-Terrorism Coordination Compact'** to combat international terrorism and coordinate efforts across the peace and security, humanitarian, human rights and sustainable development sectors.
- The framework is an agreement between **UN chief, 36 organisational entities, the International Criminal Police Organisation (INTERPOL) and the World Customs Organisation** to better serve the needs of member states when it comes to tackling the scourge of international terrorism.
- **The 2018 Global Terrorism Index released by the Institute for Economic and Peace**, indicates that despite a 27% fall in the number of deaths from acts of terrorism worldwide, the impact of terrorism remains widespread, with 67 countries experiencing deadly attacks, which is the second highest recorded number of countries in the past twenty years.

➢ **The 39th annual Gulf Cooperation Council (GCC) summit took place in Riyadh**

- The GCC, made up of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE, was established in 1981 to foster socioeconomic, security and cultural cooperation in the region
- At the end of the summit, the council issued the ***'Riyadh Declaration'***, which included 72 items covering matters related to the Gulf countries, the region and the world.

➢ **Partners' Forum 2018**

- The fourth Partners' Forum was recently held in New Delhi. It was hosted by the Government of India, in association with the **Partnership for Maternal, Newborn and Child Health (PMNCH).**
- The previous chapters were held in Johannesburg, South Africa (2014), New Delhi, India (2010) and Dar-e-Salaam, Tanzania (2007). This is the second time India is hosting the Partners' Forum.
- Partners' Forum is *a* global health partnership launched in September 2005 to accelerate efforts to reduce **child and maternal mortality**, improve adolescent, child, newborn and maternal health.
- This partnership is an alliance of more than 1,000 plus members, across 10 constituencies in 92 countries: academic, research and teaching institutions; donors and foundations; health care professionals; multilateral agencies; non-governmental organizations; partner countries; global financing mechanisms and the private sector.
- ***PMNCH's mission*** is to support the global health community to work successfully towards achieving the Sustainable Development Goals (SDGs), particularly the health related SDGs.

➢ **Japan considers withdrawing from international accord to resume commercial whaling**

- **The IWC was established in 1946 to conserve and manage the world's whale and cetacean population.** It introduced a moratorium on commercial whaling in 1986 after some species had been fished to near extinction.
- Japan insists whale stocks have now recovered sufficiently to allow commercial hunting to resume. Tokyo currently observes the moratorium but exploits a loophole to kill hundreds of whales every year for "scientific purposes" as well as to sell the meat.
- the country is unlikely to catch whales in the Antarctic Ocean even if it did withdraw from the IWC, as it is eyeing commercial whaling only in seas near Japan and its exclusive economic zone.
- **Iceland, along with Norway, openly defies the IWC's 1986 ban on commercial whale hunting.**
- **The Southern Ocean Whale Sanctuary** surrounding the continent of Antarctica and the **Indian Ocean Whale Sanctuary** by the tiny island nation of the Seychelles are the only whale sanctuaries designated by IWC.

➢ **Agreement on Prohibition of Attacks against Nuclear Installations and Facilities**

✓ Both India and Pakistan have exchanged their list of nuclear installations. The exchange was in accordance with the ***Agreement on Prohibition of Attacks against Nuclear Installations and Facilities between Pakistan and India***.

✓ The agreement, which was signed **on December 31, 1988, and entered into force on January 27, 1991**, provides that the two countries inform each other of nuclear installations and facilities to be covered under the pact on **the first of January of every calendar year.**

➢ **Indian Ocean Naval Symposium (IONS)**

Navy commanders of the Indian Ocean littoral states will convene in ***Bandar Abbas*** (IRAN) in February for participating in Indian Ocean Naval Symposium (IONS).

✓ IONS, the 21st century's first significant international maritime security initiative launched in February 2008, provides ***a forum for discussion of regional maritime issues and promotes friendly relationships among member nations***.

- ✓ ***It is a voluntary initiative*** that seeks ***to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region*** by providing an open and inclusive forum for discussion of regionally relevant maritime issues..
- ✓ The 35 ***member nations*** of the IONS are grouped into four sub-regions- South Asian, West Asian, East African and South East Asian and Australian.

- ➢ **India and South Africa have sealed *a three-year strategic programme* covering all aspects of bilateral ties.**
- ✓ ***The strategic programme will cover*** cooperation in a range of areas, including defence and security, trade and investment, the blue economy, tourism, IT and agriculture.
- ✓ Strategic Partnership has been established between India and South Africa through the ***Red Fort Declaration of March 1997 and the Tshwane Declaration of October 2006***.

- ➢ **The ruling coalition led by Bangladesh Prime Minister Sheikh Hasina of Awami League has registered a landslide victory** in Parliamentary elections.The ruling coalition led by Sheikh Hasina's Awami League party won 288 out of 300 seats which are about 96 per cent of the seats.

- ➢ **International Solar Alliance (ISA)**

The International Solar Alliance (ISA) is going to propose ***a new bank exclusively for financing energy access to billions***. *ISA has asked the Asian Development Bank to prepare a concept note*.

About ISA

- The ***Paris Declaration*** establishes ISA as an alliance dedicated to the promotion of solar energy among its member countries.
- The ISA's major objectives include global deployment of over 1,000GW of solar generation capacity and mobilisation of investment of over US$ 1000 billion into solar energy by 2030.
- When the ISA Framework Agreement entered into force on December 6th, 2017, ISA formally became a de-jure treaty based International Intergovernmental Organization, headquartered at Gurugram , India

- ➢ **Asia Reassurance Initiative Act of 2018**

U.S. President Donald J. Trump has signed into law the Asia Reassurance Initiative Act (ARIA), which has already been passed by the U.S. Senate.

- ✓ **The ARIA Act, specifically, calls for America's increased engagement in the Indo-Pacific region and strengthened support**, including arms sales, for U.S. allies in the region.
- ✓ Key highlights of the Act include security interest, economic engagement and Promoting values (Democracy, Rule of Laws, Civil society and Human Rights).

- ➢ The ***fourth edition of the Raisina Dialogue***, India's flagship annual conference on geopolitics and geo-economics*,* ***titled 'World Reorder'***, was recently held in New Delhi.
- ✓ ***This is an annual geo-political event, organised by the Ministry of External Affairs and Observer Research Foundation (ORF)****.*

- ✓ It is designed ***to explore prospects and opportunities for Asian integration as well as Asia's integration with the larger world***. It is predicated on India's vital role in the Indian Ocean Region and how India along with its partners can build a stable regional and world order.
- ✓ The United States Chamber of Commerce's Global Innovation Policy Center (GIPC) launched ***a new innovation initiative*** at the Raisina Dialogue in New Delhi.
- The ***initiative, titled "Fair Value for Innovation", would enable breakthrough innovation, and explore how policymakers can harness innovation capital*** in India and around the globe through research, advocacy, partnerships, and programs.

➢ **Henley Passport Index**

The Henley Passport Index (HPI) is a global ranking of countries according to the travel freedom for their citizens. It started in 2006 as Henley & Partners Visa Restrictions Index (HVRI) and was modified and renamed in January 2018.

- ✓ The HPI consists of a **ranking of passports according to how many other territories can be reached 'visa-free'** . All distinct destination countries and territories in the IATA database are considered.
- ✓ The Index is based on data provided by the International Air Transport Authority (IATA) and **covers 199 passports and 227 travel destinations**.
- ✓ **India jumped two positions from 81st in 2018 to 79th this year(2019).**
- ✓ **Japan retained its top spot as the world's most travel-friendly passport** due to the document's access to 190 countries.

➢ **Sino-India Digital Collaboration Plaza(SIDCOP)**

The Sino-Indian Digital Collaboration Plaza (SIDCOP) has been launched by the ***National Association of Software and Services Companies (NASSCOM)*** in association with Municipal Governments of Guiyang and Dalian.

- ✓ 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.
- ✓ It offers ***a boundary-less marketplace for Chinese enterprises in order to assist them in operational optimization and adopting industry best practices*** in business solutions by connecting with Indian enterprises.

➢ **India has lodged a strong protest on recent *order by Supreme Court of Pakistan on the so-called "Gilgit-Baltistan" which is an interference in India's internal affairs***.

- ✓ The Supreme Court of Pakistan has ***extended its powers to Gilgit-Baltistan*** regarding the area's constitutional status. The order states that changes to the ***constitutional status of Gilgit-Baltistan will be determined through a referendum*** which will be held within 14 days.
- ✓ Entire state of Jammu and Kashmir, which also includes the so-called 'Gilgit-Baltistan' has been, is and shall remain ***an integral part of India***. Pakistan government or judiciary ***have no locus standi on territories illegally and forcibly occupied by it.*** Any action to alter the status of these occupied territories by Pakistan has no legal basis whatsoever.

- ***Palestine has taken over the chairmanship of G77 from Egypt***

The chairmanship of the G77 is based on the system of geographical rotation. 2019 was Asia's turn and the Asian group had unanimously endorsed Palestine. Egypt was representing the African Group of countries.

G77

- The Group of 77 (G77) at the United Nations is a coalition of 134 developing nations, designed to promote its members' collective economic interests and create an enhanced joint negotiating capacity in the United Nations.
- G77 was formed on 15 June 1964 by the "Joint Declaration of the Seventy-Seven Countries" issued at the United Nations Conference on Trade and Development (UNCTAD).
- Since **China participates in the G77 but does not consider itself to be a member**, all official statements are issued in the name of The Group of 77 and China.

- **Corruption Perception Index-2018**

Corruption Perception Index -2018 has been released

- The index **ranks 180 countries and territories by their perceived levels of public sector corruption according to experts and businesspeople**.
- It uses a **scale of 0 to 100**, where 0 is highly corrupt and 100 is very clean.
- **Denmark is the world least corrupt country** scoring 88 out of 100 points. Denmark is followed by New Zealand and Finland.
- **Somalia has been ranked last** with a score of 10 behind South Sudan and Syria.
- **India's ranking increased from 81st in 2017 to 78 in 2018**. India had slid from 79th rank in 2016.
- It is released by **Berlin-based non-government organisation Transparency International (TI).**

- **Salome Zurabishvili is Georgia's first female president. With this, the country has transformed itself into a parliamentary republic with a largely ceremonial president**

- **Global Compact for Safe, Orderly and Regular Migration: The Conference was hosted by the Government of Morocco as agreed to by UN member states in the 'New York Declaration for Refugees and Migrants**

- The **aim of the Global Compact for Migration** is to improve the cooperation and management of cross-border movements of people, the Global Compact also makes clear that it is legally non-binding, fully respecting the sovereignty of all States.
- The Global Compact encompasses 23 objectives **to help manage migration at all levels - global, national and local.**

4 key objectives of Global Compact for Migration:

- ✓ Ease the pressures on host countries
- ✓ Enhance refugee self-reliance
- ✓ Expand access to third-country solutions
- ✓ Support conditions in countries of origin for return in safety and dignity.

- **India-US Air Force exercise 'Ex Cope India-18'**

- It will provide operational exposure to their personnel and undertake mutual exchange of best practices for enhancing operational capability.
- It will be the fourth edition in the series of bilateral joint exercise held by the Air Forces of the two nations conducted in India and has been planned at two air force bases in West Bengal (first time).

- **EX SHINYUU Maitri-2018 With JASDF Commences**

- The **Japanese Air Self Defence Force (JASDF**) was in India for a bilateral air exercise **SHINYUU Maitri-18** with Indian Air Force from 03-07 Dec 18 at A F Station Agra.
- The theme of the exercise is joint **Mobility/Humanitarian Assistance & Disaster Relief (HADR) on Transport aircraft**. The JASDF C2 aircraft along with aircrew/observers are part of this **first air exercise between the two Air Forces.**

- **Sino-India Joint Exercise Hand-in-Hand 2018**

- 7th Sino-India joint exercise Hand-in-Hand 2018, scheduled from 10 to 23 December 2018 was held on 11 December 2018 at Chengdu, China.
- The exercise will consist of a balance of indoor classes and outdoor training activities. The aim of the exercise is to build and promote close relations between armies of both the countries and to enhance ability of the joint exercise commander to take military contingents of both nations under command. The exercise will involve tactical level operations in an international counter insurgency/ counter terrorism environment under UN mandate.

- **Ex AVIAINDRA 2018 between Indian Air Force (IAF) and Russian Federation Aerospace Force (RFASF).**

- The second edition of Ex AVIAINDRA is aimed at exposing RFASF and IAF pilots to single/multi aircraft missions in a Counter Terrorism Scenario within the predefined scope.

- **Information Fusion Centre – Indian Ocean Region (IFC-IOR)**

- With an aim to strengthen maritime security in the Indian Ocean Region (IOR), Indian Navy has launched its Information Fusion Centre (IFC) that will share information on vessels of interest with other friendly nations.
- IFC will function as a platform where multiple friendly nations can freely exchange non-sensitive information from maritime domain.
- **IFC is based at the Indian Navy's Information Management and Analysis Centre (IMAC) at Gurugram in the National Capital Region**. IMAC is the single point centre on Indian Navy, linking all the coastal radar chains to generate a seamless real-time picture of the nearly 7,500km coastline.

- ***Aadhaar cards are now valid travel documents for Indians under 15 and over 65 travelling to Nepal and Bhutan***. Indians other than those in the two age brackets will not be able to use Aadhaar to travel to the two neighbouring countries, for which no visas are needed.

➢ **Govt rejects demand for different time zone for northeastern states for 'strategic reasons'**

- Back in October, 2018, the CSIR-National Physical Laboratory (CSIR-NPL) and the National Measurement Institute (NMI) of India explored the possibility and also proposed an implementable solution**.**
- **Earth is divided into 360 vertical lines or the longitudes. A shift in every longitude gives a time difference of four minutes; so, the planet is divided into 24 time zones.**
- Longitude is the angular distance between a point on any Meridian and the prime meridian in Greenwich. The time at Greenwich is called as Greenwich Mean Time (GMT).

For details on this issue, refer to the Quick Revision for Prelims (Jun-Nov, 2018)

➢ **Clause 6 of Assam Accord**

The Union Home Ministry will set up ***a high-level committee to look into the implementation of Clause 6 of the Assam Accord***. The composition and terms of reference of the committee, which will also look at issues related to the Bodo community, will be announced later.

The Committee will:

- Hold discussions with all stakeholders and assess the required quantum of reservation of seats in the Assam Assembly and local bodies for Assamese people.
- Look at measures to protect Assamese and other indigenous languages of Assam, reservation in state government jobs, and other steps to protect, preserve and promote cultural, social, linguistic identity and heritage of Assamese people.
- Suggest constitutional, legislative and administrative safeguards and examine the effectiveness of actions since 1985 to implement the clause.

Assam Accord

The Assam Accord (1985) was ***a Memorandum of Settlement (MoS) signed between representatives of the Government of India and the leaders of the Assam Movement in New Delhi on 15 August 1985***.

- ✓ The accord brought an end to the Assam Agitation and paved the way for the leaders of the agitation to form a political party and form a government in the state of Assam soon after.
- ✓ As per the Accord, **those Bangladeshis who came between 1966 and 1971 will be barred from voting for ten years**. The Accord also mentions that the **international borders will be sealed and all persons who crossed over from Bangladesh after 1971 are to be deported**.
- ✓ Though the accord brought an end to the agitation, some of the key clauses are yet to be implemented, which has kept some of the issues festering.

➢ **Shi Yomi becomes 23rd district of Arunachal Pradesh**

- The district, consisting of four circles **— Mechuka, Pidi, Tato and Monigong — was carved out of West Siang district.**
- **Owing to its large geographical area**, **inaccessible terrains and the district headquarters Aalo being far from these four circles**, the State Assembly gave its nod to the creation of the new district**.**

➢ **Indigenous gun trials of the Army to enter next stage by June**

- The development of the indigenously-designed heavy artillery gun, the **Advanced Towed Artillery Gun System (ATAGS),** has advanced to a stage where user-assisted trials of the gun are likely to start by June,2019.

Firing on all cylinders

- Advanced Towed Artillery Gun System (ATAGS) is a 155mm, 52 calibre gun, developed by Defence Research and Development Organisation (DRDO) in a consortium model
- One prototype has been built in partnership with Tata Power (Strategic Engineering Division) and another with Bharat Forge
- Two guns from each company are undergoing trials; two more guns to join trials later
- There is a sanction for production of 10 guns as part of the development process
- The gun currently weighs about 18 tonnes while the ideal weight is 14-15 tonnes
- The defence Ministry has approved purchase of 150 guns at an approximate cost of ₹3,365 crore
- The Army is in the process of finalising the Preliminary Specifications Qualitative Requirements (PSQR) which details the essential parameters, which should be ready by July 2019
- The gun is presently undergoing development trials. User assisted trials will begin from May-June 2019

KEY FEATURES

- Electric drive
- High mobility
- Quick deployability
- Auxiliary power mode
- Advanced communication system
- Automated command
- Control system
- Six round magazine instead of a standard three round magazine

➢ **COP24 in Katowice, Poland : Major Outcomes**

- **The 2018 United Nations Climate Change Conference** that took place between 2 and 15 December 2018 in Katowice, Poland, is the **24th Conference of the Paris**.
- The participating nations agreed on the rules to implement the Paris Agreement that will come into effect in 2020. The rules are regarding how the member nations will measure the carbon-emissions and report on their emissions-cutting efforts.
- **The members of the conference did not agree to "welcome" the Intergovernmental Panel on Climate Change (IPCC) report on 1.5°C**. **The US, Saudi Arabia, Russia and Kuwait refused to "welcome" the IPCC report.**
- The parties to the conference **agreed to record the pledges in a public registry**, as per the existing interim portal. The public registry will continue to include a search function, although many attempts have been made to get it deleted.
- **It was also agreed among the members that future pledges should cover a "common timeframe" from 2031**. The number of years for the timeframe will be decided later.
- **The 2019 Long-Term Climate Risk Index, published by Germanwatch,** has listed **Puerto Rico**, Sri Lanka, and Dominica as the top three affected countries. The index is **part of a report – Global Climate Risk Index 2019 – which was released at the annual climate summit in Poland in December.**
- **The Global Climate Risk Index 2019** analyses to what extent countries and regions have been affected by impacts of weather-related loss events such as storms, floods, heat waves, etc., from data available for 2017 and from 1998 to 2017.

Theme of India Pavilion: "One World One Sun One Grid"

➢ **Hornbill Festival: Nagaland**

- This annual festival is held in the month of December, at the **Naga Heritage Village in Kisama**, which is around 12 km from the capital city Kohima.
- The **great hornbill** (*Buceros bicornis*) also known as the **great Indian hornbill** or **great pied hornbill**, is one of the larger members of the hornbill family. It is found in the Indian subcontinent and Southeast Asia. It is Listed as **"Vulnerable".**
- **The great hornbill is long-lived, living for nearly 50 years in captivity**. It is predominantly frugivorous (fruit eating), but is an opportunist and will prey on small mammals, reptiles and birds.

➢ **World Bank Doubles Funding To $200 Billion To Fight Climate Change**

- The World Bank has unveiled $200 billion in climate action investment for 2021-25, adding this amounts to a doubling of its current five-year funding.
- Developed countries are committed to lifting combined annual public and private spending to $100 billion in developing countries by 2020 to fight the impact of climate change.
- Much of the climate action financing is being set aside for reducing greenhouse gas emissions, notably through development of renewable energy strategies.
- However, a key priority is boosting support for climate adaptation," given the millions of people already battling the consequences of extreme weather.

➢ **Shapoorji Pallonji bags country's first large-scale floating solar project**

- India's first large-scale floating solar project is on its way with Shapoorji Pallonji winning the first block in Solar Energy Corporation of India's auction of 150 MW of such projects on the **Rihand Dam**, along the **Uttar Pradesh-Madhya Pradesh border.**
- **Rihand Dam, also known as Govind Ballabh Pant Sagar**, is the country's largest reservoir by volume and largest artificial lake, located on the Rihand River with its catchment area spread over Uttar Pradesh, Madhya Pradesh and Chhattisgarh.
- **Rihand is atributary of the river Son, which itself is a tributary of the National River Ganga.**

➢ **Distribution of Soil Health Cards (SHC) for optimal utilization of fertilizers**

- Soil Health Card Scheme has been taken up for the first time in a comprehensive manner across the country. Under the scheme soil health cards are provided to all farmers so as to enable the farmers to apply appropriate recommended dosages of nutrients for crop production and improving soil health and its fertility.

The unique features of SHC scheme are:-

- Collecting soil samples at a grid of 2.5 ha in irrigated area and 10 ha in un-irrigated areas.
- **Uniform approach in soil testing adopted for 12 parameters** viz. primary nutrients (NPK); secondary nutrient (S); micronutrients (B,Zn, Mn. Fe & Cu); and other (pH, EC & OC) for comprehensiveness.
- **GPS enabled soil sampling** to create a systematic database and allow monitoring of changes in the soil health over the years.

World Soil Day is celebrated on 5th of December.

➢ **India Water Impact Summit-2018**

- The India Water Impact Summit,organised jointly by the National Mission for Clean Ganga (NMCG) and the Centre for Ganga River Basin Management and Studies (cGanga), is an annual event where stakeholders get together to discuss, debate and develop model solutions for some of the biggest water related problems in the country. The discussions this year were on rejuvenation of the Ganga River Basin.
- The Summit focused on three key aspects:

✓ **Spotlight on 5 states**: **Uttarakhand, Uttar Pradesh, West Bengal, Delhi and Bihar**. The objective is to showcase the efforts and works going on within the respective states.

✓ **Ganga Financing Forum**: introduced the inaugural Ganga Financing Forum that will bring a number of institutions to a common knowledge, information and partnership platform. The Hybrid Annuity Model has redefined the economic landscape of water and waste-water treatment in India.

✓ **Technology and Innovation:** Implementation of the pilot/demonstration programme known as the Environment Technology Verification (ETV) process.

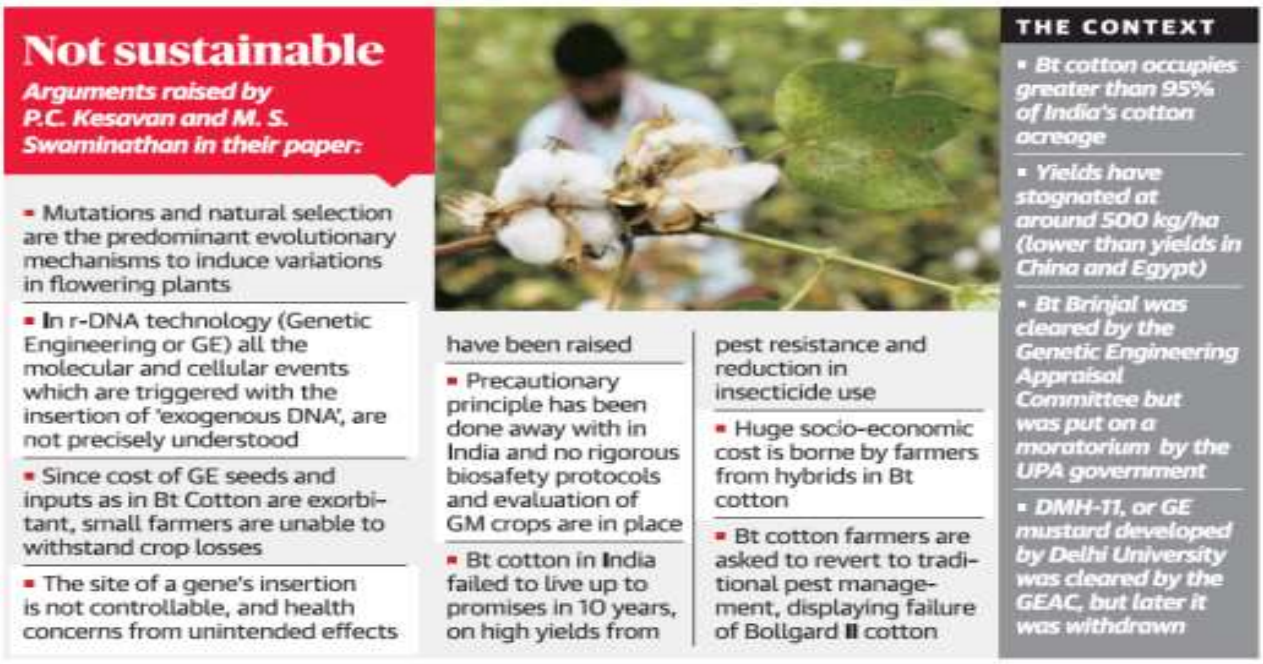
➢ **India third largest contributor to carbon emission**

- India, the third-highest contributor, is projected to see emissions rise by 6.3% from 2017.
- Global carbon emissions are set to hit an all-time high of 37.1 billion tonnes of CO2 in 2018.

- The 2.7% projected global rise in 2018 has been **driven by appreciable growth in coal use for the second year in a row, and sustained growth in oil and gas use**.
- The 10 **biggest emitters in 2018 are China, U.S., India,** Russia, Japan, Germany, Iran, Saudi Arabia, South Korea, and Canada.
- **The Global Carbon Project was formed in 2001** to help the international science community to establish a common, mutually agreed knowledge base that supports policy debate and action to slow the rate of increase of greenhouse gases in the atmosphere.

➢ **M.S. Swaminathan calls GM crops a failure**

- A research paper co-authored by leading agriculture scientist M.S. Swaminathan, the article is a review of crop development in India and transgenic crops — particularly Bt cotton, the stalled Bt brinjal as well as DMH-11, a transgenic mustard hybrid. The latter two have been cleared by scientific regulators but not by the Centre.



➢ **Report on 'toxic' talc worries India**

- A risk assessment draft on talc published by Health Canada, the country's public health department, states that **talcum powder is harmful to the lungs when inhaled during breathing and could possibly cause ovarian cancer when used by women in the genital area.**
- In India, talcum powder is among the most widely known talc-based self-care products. From fighting perspiration and odour, to helping lend the user a 'fairer' skin tone, a large number of Indian consumers rely on talcum powder.
- Canada's draft states that the IARC has classified perineal use of talc-based body powder as "possibly carcinogenic to humans" on the basis of limited evidence in humans.
- Talc or Talcum , is a clay mineral consisting of hydrated Magnesium Silicate.

➢ **Are drugs discharged into the Yamuna toxic to aquatic life?**

- By studying nine different pharmaceutical active compounds in Yamuna river, researchers have now pointed out that it can "possibly cause chronic toxicity" to aquatic life and to humans who use this water for drinking purposes.
- As our body does not use the entire quantity of the drug we take, most of it is excreted and end up in aquatic systems via domestic sewage. The team looked at six over-the-counter drugs (aspirin, paracetamol, ibuprofen, ranitidine, caffeine, diclofenac) and three prescription drugs (carbamazepine, codeine, diazepam).
- Caffeine was found in high concentration in most of the sites. Caffeine is used as a stimulant in medicine; residue from beverages and other food products .
- Uncontrolled discharge of drug-containing effluents in our rivers and other water bodies can potentially make many microbes drug-resistant.

➢ **1st International Conference on Sustainable Water Management**

- First International Conference was organized under the aegis of **National Hydrology Project, Union Ministry of Water Resources, River Development and Ganga Rejuvenation by Bhakra Beas Management Board (BBMB**) at Indian School of Business (ISB), **Mohali** on **the theme 'Sustainable Water Management'.**
- The aim of the Conference is to foster the participation of and dialogue between various stakeholders, including governments, the scientific and academic communities, so as to promote sustainable policies for water management, to create awareness of water-related problems, motivate commitment at the highest level for their solution and thus promote better management of water resources at local, regional, national and international.

➢ **Ministry of New and Renewable Energy Conferred the Skoch Award for National Significance**

- Recognizing the pivotal role government plays in pushing green energy, Ministry of New and Renewable Energy, Government of India has been conferred with the **Skoch** Award for National Significance.
- Considering the impact of the ministry, its purpose and the critical role played by the government in installing about 73 GW of renewable energy, the ministry had been selected for the award.
- Presently, **India is ranked fourth in the world in wind energy** capacity and **fifth in itotal solar and renewable power capacity.**
- In a latest push, Ministry of New and Renewable Energy (MNRE) had announced its plans for **23 GW of solar projects in Leh and Ladakh regions of Jammu & Kashmir.**
- Solar Energy Corporation of India which is implementing the project, will tender 5000 MW in Leh district and 2500 MW in Kargil district in the Phase-1 of the project**.**

➢ **National Mission for Clean Ganga (NMCG) made its effort to reduce pollution in river Ganga when PM inaugurated projects in Prayagraj including 175 KM of sewerage network.**

- The project will now carry 7.8 Cr litres sewage water per day to **existing STPs (Sewage Treatment Plants) at Salori, Kodra & Ponghat** for treatment earlier ended up in Ganga.

National Mission for Clean Ganga (NMCG): It was registered as a society on 12th August 2011 under the Societies Registration Act 1860. It acted as implementation arm of **National Ganga River Basin Authority**

(NGRBA), constituted under the provisions of the **Environment (Protection) Act (EPA), 1986**.
The Act envisages five-tier structure at national, state and district level to take measures for prevention, control and abatement of environmental pollution in river Ganga and to ensure continuous adequate flow of water so as to rejuvenate the river Ganga as below:

1. **National Ganga Council under the chairmanship of Prime Minister of India.**
2. **Empowered Task Force (ETF) on river Ganga under chairmanship of Hon'ble Union Minister of Water Resources, River Development and Ganga Rejuvenation.**
3. **National Mission for Clean Ganga (NMCG).**
4. **State Ganga Committees, and**
5. **District Ganga Committees in every specified district abutting river Ganga and its tributaries in the states.**

➢ **India, Nepal, Bhutan plan joint task force to protect wildlife**

- The **governments of India, Nepal and Bhutan** are actively considering having a joint task force for allowing free movement of wildlife across political boundaries and **checking smuggling of wildlife across the Kanchenjunga Landscape, a trans-boundary region spread across Nepal, India and Bhutan**.
- The landscape stretches along the southern side of Mount Kanchenjunga covers an area of 25,080 sq km spread across parts of eastern Nepal (21%), Sikkim and West Bengal (56%) and western and south-western parts of Bhutan (23%).
- Other than seven million people, the Kanchenjunga Landscape is also home to 169 species of mammals and 713 species of birds.
- every few months there were cases of elephants, rhino and gaurs and other mammals crossing over political boundaries, triggering panic among locals across the border and also posing danger to the wildlife.
- **South Asia Wildlife Enforcement Network (SAWEN)**, a Regional network is comprised of eight countries in South Asia: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. It aims at working as a strong regional inter¬governmental body for combating wildlife crime by attempting common goals and approaches for combating illegal trade in the region.

➢ **The Central Ground Water Authority of the Union Ministry of Water Resources, River Development and Ganga Rejuvenation notified revised guidelines for ground water extraction.**

- The revised guidelines aim to ensure a more robust ground water regulatory mechanism in the country and include:

✓ Encouraged use of **recycled and treated sewage** water by industries.

✓ Provision of action against polluting industries.

✓ **Mandatory requirement of digital flow meters**, piezometers and digital water level recorders, with or without telemetry depending upon quantum of extraction.

✓ **Mandatory water audit by industries** abstracting ground water 500 m^3/day or more in safe and semicritical area and 200 m^3/day or more in critical and over-exploited assessment units.

- ✓ **Mandatory roof top rain water harvesting except for specified industries**.
- ✓ Measures to be adopted to ensure prevention of ground water contamination in premises of polluting industries/ projects.
- The revised guidelines exempt the requirement of NOC for agricultural users, users employing nonenergised means to extract water, individual households (using less than 1 inch diameter delivery pipe) and Armed Forces Establishments during operational deployment.
- One of the important features of the revised guidelines is the introduction of the concept of Water Conservation Fee (WCF), the fee charged on extraction of ground water

➢ **World Bank praises India's renewable energy success**

- World Bank has released its report — **Regulatory Indicators for Sustainable Energy (RISE) 2018**—charting global progress on sustainable energy policies. It was released on the sidelines of COP24 at Katowice, Poland.
- The latest edition of the **Regulatory Indicators for Sustainable Energy (RISE)** finds that in the past decade, the number of countries with strong policy frameworks for sustainable energy has more than tripled since 2010.
- RISE 2018 rates 133 countries from 2010-17 on electricity access, renewable energy, energy efficiency and access to clean cooking to provide useful data to policymakers and help the private sector make informed decisions about investing in energy projects
- The World Bank praised India's success in renewable energy auctions that delivered record-setting low prices for solar power.

➢ **The Supreme Court directed the Union Environment Ministry to declare 10 km area around 21 national parks and wildlife sanctuaries across the country as 'eco-sensitive zones**

- The parks and sanctuaries are the **Pobitora sanctuary in Assam**; **Hemis High Altitude and Kishtewar national parks, Changthang, Hokersar, Trikuta sanctuaries in Jammu and Kashmir; Jogimatti, Thimlapura and Yadahalli Chinkara sanctuaries in Karnataka; Deolgaon Rehekuri and Thane Creek Flamingo sanctuaries and the Malvan marine sanctuary in Maharashtra; Siroi National Park and Khongjaingamba Ching sanctuary in Manipur; Baghmara Pitcher Plant sanctuary in Meghalaya; Fakim and Puliebadze and Rangapahar sanctuaries in Nagaland; Dr. Bhimrao Ambedkar bird sanctuary and Pilibhit sanctuary in Uttar Pradesh and the Jorepokhri sanctuary in West Bengal.**

For details on Eco sensitive zones refer to the **Quick Revision for Prelims(Jun-Nov,2018).**

➢ **ECO Niwas Samhita 2018 - an Energy Conservation Building Code for Residential Buildings launched**

- The implementation of this Code will give a fillip to energy efficiency in residential sector. It aims to benefit the occupants and the environment by promoting energy efficiency in design and construction of homes, apartments and townships.
- **The Code is expected to assist large number of architects and builders who are involved in design and construction of new residential complexes** in different parts of the country.
- Implementation of this Code will have potential for energy savings to the tune of 125 Billion Units of electricity per year by 2030, which is equivalent to about 100 million ton of Co2 emission.

BEE is a statutory body under Ministry of Power which is mandated to implement policy and programmes in the area of energy efficiency and conservation. India has committed to reduction of 33-35% GHG emission by 2030 as part of the document submitted to UNFCCC.

➢ **Temple waste recycle project from India receives UN honour**

- An Indian private project, '**HelpUsGreen'**, which collects flowers from temples and mosques **across many cities\towns in Uttar Pradesh** and recycles them to produce natural incense, organic fertilizers and biodegradable packaging material, is one of 15 ground-breaking projects from around the world that has won this **year's UN climate action award(2018)**
- The UN climate change body has shared that the HelpUsGreen can easily be replicated in any city. It currently works in Uttar Pradesh, with plans to expand to Bangladesh, and Nepal.
- Developed as the world's first profitable solution to the monumental temple waste problem, the HelpUsGreen's products are handcrafted by women who earlier used to be manual scavengers. The HelpUsGreen aims to provide livelihoods to 5,100 women and recycle 51 tonnes of temple waste daily by 2021.

➢ **Campaign launched to save the Great Indian Bustard from extinction**

- The wildlife organisations that have launched the campaign **are The Corbett Foundation in collaboration with Conservation India and Sanctuary Nature Foundation**.
- The campaign aims at highlighting the overhead power transmission lines that result in the death of these low flying birds with a limited field of vision. This is the primary threat to the survival of the species especially in the Great Indian Bustard Habitat**.**
- **Great Indian Bustard is listed in Schedule I of the Indian Wildlife (Protection)Act, 1972, in the CMS Convention and in Appendix I of CITES, as Critically Endangered on the IUCN Red List.**
- **It has also been identified as one of the species for the recovery programme under the Integrated Development of Wildlife Habitats** of the Ministry of Environment and Forests, Government of India**.**
- Protected areas:

✓ **Desert National Park Sanctuary — Rajasthan.**

✓ **Rollapadu Wildlife Sanctuary – Andhra Pradesh.**

✓ **Karera Wildlife Sanctuary– Madhya Pradesh.**

➢ **Centre to give Indian Forest Act a facelift**

- The Ministry of Environment, Forest and Climate Change (MoEF&CC) has started the process of "comprehensively amending" the backbone of **forest governance in India—the Indian Forest Act, 1927 (IFA).**
- Currently**, there is no definition of forest in any Indian law pertaining to forest or its governance.** Therefore, the amendments will also include definitions of terms like forests, pollution, ecological services etc**.**
- According to the **1996 Supreme Court order, the dictionary definition of the word forest is taken to be the legal definition too.** It covers all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2(i) of the Forest Conservation Act

(1980). As per the Court order, the term forest land, occurring in Section 2, will not only include forest as understood in the dictionary sense, but also any area recorded as forest in the government record irrespective of the ownership.

The Indian Forest Act, 1927 was largely based on previous Indian Forest Acts implemented under the British. The most famous one was the Indian Forest Act of 1878. Both the 1878 act and 1927 one sought to consolidate and reserve the areas having forest cover, or significant wildlife, to regulate movement and transit of forest produce, and duty leviable on timber and other forest produce. **It also defines the procedure to be followed for declaring an area to be a Reserved Forest, a Protected Forest or a Village Forest.** It **defines what a forest offence** is, what are the acts prohibited inside a Reserved Forest, and penalties leviable on violation of the provisions of the Act.

➢ **INDIA'S SECOND BIENNIAL UPDATE REPORT (BUR) TO UNFCCC**

- **The second biennial update report aims to provide an update to India's first biennial report to the United Nation's body on climate change**. The report contains **five major components including national circumstances, national greenhouse gas inventory, mitigation actions, finance, technology and capacity building** needs and support received and domestic monitoring, reporting and verification arrangements.
- Out of the total emissions, energy sector accounted for 73%, IPPU 8%, agriculture 16% and waste sector 3%. About 12% of the emissions were offset by the carbon sink action of forestland, cropland and settlements.

INDC- India's proposed targets:

- **Reduce emissions intensity** of its GDP by 33 to 35% by 2030 from 2005 level.
- **Achieve about 40% electric power installed capacity from non-fossil fuel based energy resources** by 2030 with help of transfer of technology and low cost international finance.
- **Create an additional carbon sink** of 2.5 to 3 billion tonnes of CO2 equivalent through additional forest and tree cover by 2030.

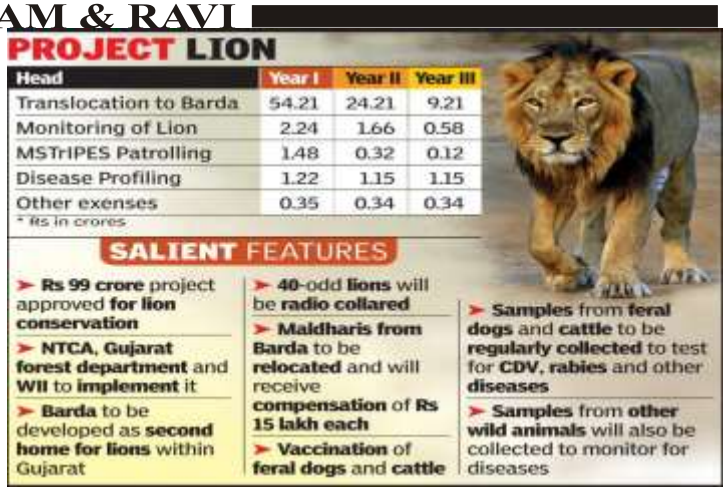
➢ **River Dolphins go missing in Sunderbans as water salinity rises**

- **Rise in salinity** in the water system that makes the Indian **Sunderbans** has resulted in the decrease of population of the Ganges River Dolphins in the region.
- **Because of its unique body shape, it becomes difficult for the dolphin to remain submerged in waters with high salinity.**
- The rise in sea level, triggered by climate change, is one of the reasons for the increase in salinity of waters of rivers and channels. Hydrological modifications like water diversion and commission of large barrages upstream have had a great impact on the salinity profile of the rivers downstream in the Sunderbans.
- Gangetic river dolphins fall under **Schedule I of the Indian Wildlife (Protection) Act.** It has been declared an **'endangered'** species by the International Union for Conservation of Nature (IUCN).

➢ **Government Launches Asiatic Lion Conservation Project**

- **The Ministry of Environment, Forest and Climate Change** has launched the **'Asiatic Lion Conservation Project'** with an aim to protect and conserve the world's last ranging free population of Asiatic Lion and its associated ecosystems.

- Asiatic lions that once ranged **from Persia (Iran) to Palamau** in Eastern India were almost driven to extinction by indiscriminate hunting and habitat loss. A single population of less than 50 lions persisted in the Gir forests of Gujarat by late 1890's.



- **Asiatic lions** have increased to the **current population of over 500 numbers**. The last census in the year 2015 showed the population of 523 Asiatic Lions in Gir Protected Area Network of 1648.79 sq. km**. that includes Gir National Park, Gir Sanctuary, Pania Sanctuary, Mitiyala Sanctuary adjoining reserved forests, Protected Forests, and Unclassed Forests.**
- **The total budget of the project for 3 years that amounts to nearly Rs. 9784 lakh will be funded from the Centrally Sponsored Scheme- Development of Wildlife Habitat (CSS-DWH) with the contributing ratio being 60:40 of Central and State share.**

➢ **REDD+ has largely failed to achieve its objectives**

- **A new study by Delhi-based non-profit Centre for Science and Environment (CSE) has revealed that Reducing Emissions from Deforestation and Forest Degradation (REDD+),** the programme initiated by the United Nations in 2005 to mitigate climate change through enhanced forest management in developing countries, has largely failed to achieve its objectives
- Large-scale finance for REDD+ has been a major issue as carbon markets have not materialised and international funding commitments for REDD+ have been much lower than expected**.**

- **PARIVESH (Pro-Active and Responsive facilitation by Interactive, Virtuous and Environmental Single-window Hub)**

PARIVESH is a single-Window Integrated Environmental Management system, developed in pursuance of the spirit of 'Digital India' initiated by the prime minister and capturing the essence of Minimum Government and Maximum Governance.

Key Features:

- "PARIVESH" is a workflow based application, based on the concept of web architecture. It has been rolled out for online submission, monitoring and management of proposals submitted by Project Proponents to the Ministry of Environment, Forest and Climate Change (MOEFCC), as well as to the State Level Environmental Impact Assessment Authorities (SEIAA).
- It seeks **to give various types of clearances** (e.g. Environment, Forest, Wildlife and Coastal Regulation Zone Clearances) from Central, State and district-level authorities.
- The system has been **designed, developed and hosted by the Ministry of Environment, Forest and Climate Change, with technical support from National Informatics Centre, (NIC)**.

- **Groundwater Crisis**

Future generations face an environmental "time bomb" as the world's groundwater systems take decades to respond to the present day impact of climate change, scientists have warned.

- ✓ As per the findings by an international team of researchers, ***groundwater reserves are already under pressure as the global population explodes and crop production rises in lockstep***. But

the extreme weather events such as drought and record rainfall — both made worse by our heating planet — could have another long-lasting impact on how quickly reserves replenish.

- ✓ Researchers found that only half of all groundwater supplies are likely to fully replenish or re-balance within the next 100 years — potentially leading to shortages in drier areas. ***This could be described as an environmental time bomb because any climate change impacts on recharge occurring now, will only fully impact the baseflow to rivers and wetlands a long time later***.

- ➢ The Union Ministry of Environment, Forest and Climate Change has notified the 2019 ***Coastal Regulation Zone (CRZ) norms***, replacing the existing CRZ norms of 2011.
- ✓ The new CRZ norms have been issued under Section 3 of the Environment Protection Act, 1986.
- ✓ The new CRZ norms aim **to promote sustainable development based on scientific principles**.

Objective of CRZ Regulations 2019*:*

- To promote sustainable development based on scientific principles taking into account the natural hazards such as increasing sea levels due to global warming.
- To conserve and protect the environment of coastal stretches and marine areas, besides livelihood security to the fisher communities and other local communities in the coastal area.

- ➢ **Nitrogen Pollution**

A major ***international research programme is being carried out to tackle the challenge that nitrogen pollution*** poses for environment, food security, human health and the economy in South Asia. ***The research programme will be carried out by South Asian Nitrogen Hub***.

- ✓ Nitrogen is an inert gas that's necessary for life. But we're changing it into forms that are harmful, overloading the environment with it, and throwing the natural nitrogen cycle out of whack.
- ✓ ***Nitrogen compounds running off farmland have led to water pollution*** problems around the world, while ***nitrogen emissions from industry, agriculture and vehicles make a big contribution to air pollution***.
- ✓ ***Over 80% of the nitrogen in soil is not utilised by humans***. While over four-fifths of the nitrogen is used to feed livestock, only about six per cent reaches humans in case of non-vegetarian diet, as compared to the 20% that reaches the plate of a vegetarian.
- ✓ According to the World Health Organization, ***nitrate-contaminated drinking water can cause reduced blood function, cancer and endemic goiters***. Surplus inputs of nitrogen compounds have been found to cause soil acidification. It may also affect natural soil decomposition.

- ➢ **Effects of Global Warming on El-Nino in the 21st Century**: A study, published in Journal nature, has thrown some light on the effects of global warming on El Niño in the 21st Century.

Highlights of the Study:

- ✓ *As per the study****, though the theater of action for El Niño is the tropical Pacific Ocean, its global reach costs the global community tens of billion dollars each time***.
- ✓ ***The study notes that strong El Niño's and thus extreme weather events associated with such strong El Niño's will increase in the coming decades***. This should serve as a warning to the countries on all continents that suffer from these extreme weather events.

- ✓ ***However, available data is not sufficient to say with confidence how the tropical Pacific has responded to global warming till now***. It is unclear if the impact of global warming on El Niño can easily be extracted considering its intrinsic tendencies and the fact that it depends on so many factors that are not easily predictable.
- ✓ ***In this context, it is imperative that models be held to very stringent standards on their performance of El Niño behaviour during historic periods***, especially the 20th century, as a test of their reliability for future projections.
- ✓ ***This would also be necessary for projecting other events such as droughts and floods. For example, droughts over India are closely tied with El Niño and any projections of how droughts will respond to global warming*** will depend on how models perform in their historic depiction of El Niños as well as monsoons and how reliably they can project El Niño response to global warming in addition to how the models perform in reproducing floods to and droughts of 20th century.
- ✓ El Nino is a climatic cycle characterised by high air pressure in the Western Pacific and low air pressure in the eastern. In normal conditions, strong trade winds travel from east to west across the tropical Pacific, pushing the warm surface waters towards the western Pacific. The surface temperature could witness an increase of 8 degrees Celsius in Asian waters. At the same time, cooler waters rise up towards the surface in the eastern Pacific on the coasts of Ecuador, Peru, and Chile. This process called upwelling aids in the development of a rich ecosystem

- ➢ **Bio-Jet Fuel for Military Aircraft**

- ✓ Indigenous produced bio-fuel has been finally cleared for use by Centre for Military Airworthiness and Certification (CEMILAC).
- ✓ ***The bio-jet fuel has been produced from seeds of Jatropha plant*** sourced from Chhattisgarh and processed at CSIR-IIP's lab at Dehradun.

- ➢ **UN Report on 'e-waste'**

To highlight the rising challenge posed by mountains of discarded electronics worldwide, ***seven UN entities have come together to launch the report-*** "A New Circular Vision for Electronics – Time for a Global Reboot"- ***at the World Economic Forum in Davos, Switzerland***, in a bid to offer some solutions to a behemoth-sized problem that is making the world sicker and adding to environmental degradation.

- ✓ The joint report ***calls for a new vision for e-waste based on the "circular economy" concept, whereby a regenerative system can minimize waste and energy leakage***.
- ✓ The report calls for ***systematic collaboration with major brands, small and medium-sized enterprises, academia, trade unions, civil society and associations*** in a deliberative process to reorient the system and reduce the waste of resources each year with a value greater than the GDP of most countries.
- ✓ The report notes that ***material efficiency, recycling infrastructure and scaling up the volume and quality of recycled materials*** to meet the needs of electronics supply chains will all be essential for future production.
- ✓ The report also advocates a system of 'urban mining' by strengthening the extended producer responsibility provision.

- **Methanol Blending in petrol**

- ✓ A study, in which methanol (M-15) was blended with petrol and used in the existing BS-IV standard cars, found that the carbon dioxide emission had reduced substantially. The study, conducted by Pune-based ***Automotive Research Association of India (ARAI)***, also found that hydrocarbon emission reduced marginally, with a slight increase in nitrogen oxides.
- ✓ The objective of the study was **to evaluate emissions in real-world conditions** as well as check the performance of the vehicles. The agency used 15% M-15 blend in vehicles and tested them for 3,000km. In auto rickshaws, the performance was similar, except for a marginal reduction in nitrogen oxides.

- The government of Arunachal Pradesh has declared the ***Pakke Paga Hornbill Festival (PPHF)– the state's only conservation festival, as a "state festival"***.

- **GEF assisted Green –Ag Project to transform Indian Agriculture**

The Government has launched the ***"Green – Ag: Transforming Indian Agriculture for global environmental benefits and the conservation of critical biodiversity and forest landscapes"*** in association with ***Global Environment Facility (GEF)***.

- ✓ The project would be implemented ***in collaboration with the Food and Agriculture Organisation (FAO)*** in high-conservation-value landscapes of five States namely, (i) Madhya Pradesh: Chambal Landscape, (ii) Mizoram: Dampa Landscape, (iii) Odisha: Similipal Landscape, (iv) Rajasthan: Desert National Park Landscape and v) Uttarakhand: Corbett-Rajaji Landscape.
- ✓ The Green-Ag project seeks ***to integrate biodiversity, climate change and sustainable land management objectives and practices into Indian agriculture***.
- ✓ The project ***aims to catalyze a 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***.
- ✓ The project supports harmonization between India's agricultural and environmental sector priorities and investments to realise the national and global environmental benefits without compromising on India's ability to strengthen rural livelihoods and meet its food and nutrition security.

- Tripura has launched the ***Sustainable Catchment Forest Management (SCATFORM) project*** which is ***undertaken with the assistance of JICA (Japan International Cooperation Agency)***.

Sustainable Catchment Forest Management (SCATFORM) project:

- ✓ The SCATFORM project aims ***to address issues such as forest cover loss and forest degradation have been mainly caused by shifting cultivation***, which increases soil erosion risks on hill slopes especially in upper catchment areas.
- ✓ It would be implemented mainly in upper catchments where forest degradation and soil erosion are severe and livelihood improvement needs are high. The project aims to the improve quality of forest in the catchment area by sustainable forest management, soil and moisture conservation and livelihood development.
- ✓ ***The activities undertaken*** under the project involves promotion of bamboo plantation, agroforestry based livelihood, eco-tourism development, development of value addition for bamboo and other Non-Timber Forest Product (NTFP) in order to create alternate livelihood opportunities for local communities.

✓ The 80 per cent of the cost is contributed by JICA and the rest would be funded by the state and central governments.

➢ India recently submitted its ***Sixth National Report to the Convention on Biological Diversity (CBD)***.

India is among the first five countries in the world, the first in Asia and the first among the biodiversity-rich megadiverse countries to have submitted the report.

Highlights of the Report *:*

- The report provides ***an update of progress in achievement of 12 National Biodiversity Targets (NBT)*** developed under the convention process in line with the 20 global ***Aichi biodiversity targets***.
- The report highlights that while India has exceeded/ overachieved two NBTs, it is on track to achieve eight NBTs and with respect to two remaining NBTs, the country is striving to meet the targets by the stipulated time of 2020.
- According to the report, India has exceeded the terrestrial component of 17% of Aichi target 11, and 20% of corresponding NBT relating to areas under biodiversity management.
- Also, India has been investing a huge amount on biodiversity directly or indirectly through several development schemes of the central and state governments, to the tune of Rs 70,000 crores per annum as against the estimated annual requirement of nearly Rs 1,09,000 crore.

Convention on Biological Diversity

- ***At the 1992 Earth Summit in Rio de Janeiro,*** world leaders agreed on a comprehensive strategy for "sustainable development" — meeting our needs while ensuring that we leave a healthy and viable world for future generations. One of the key agreements adopted at Rio was the Convention on Biological Diversity.
- The Convention on Biological Diversity is the ***international legal instrument for "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources"*** that has been ratified by 196 nations.

➢ The 2019 edition of the ***Climate Change Performance Index (CCPI)*** **published by German NGO and Climate Action Network Europe** has been released.

✓ **India ranks 11th in this year's CCPI,** improving its standing by three places compared to the previous edition.

✓ The Climate Change Performance Index (CCPI) is an instrument covering 58 countries and supposed to enhance transparency in international climate politics.

✓ Its aim is ***to encourage political and social pressure on those countries which have, up to now, failed to take ambitious actions on climate protection as well as to highlight countries with best-practice climate policies***.

- **Highlights of the Report**

✓ Only few countries have started working towards limiting global warming below 2°C or even at 1.5°C.

✓ Globally, Sweden is in top position, followed by Morocco and Lithuania in the CCPI 2019.

✓ The bottoms five in the list are Saudi Arabia, U.S., Iran, South Korea and Taiwan.

➢ **Odisha Celebrates 1st Turtle Festival in Puri**

- ***First Odisha Turtle Festival was held recently in Puri*** to create awareness and promote ideas on conservation of olive ridley turtles.
- Cox & Kings Foundation in association with Humane Society International/India and Action for Protection of Wild Animals (APOWA).
- *Odisha has half of the world's Olive Ridley turtle population and 90% of India's turtle population lives in the state*.

➢ **ECO Niwas Samhita -2018**

ECO Niwas Samhita 2018 an Energy Conservation Building Code for residential buildings, to push for energy efficiency in residential sector was launched on December 14, 2018. It aims to promote design and construction of homes including apartments and townships to give benefits of energy efficiency to the occupants. Ministry of Power launched the ECO Niwas Samhita 2018.

Role of BEE

- Processing of application for star rating of buildings
- Preliminary scrutiny of application
- Data verification of CPWD maintained buildings
- Installation of smart meters
- Support for Energy Efficiency in Buildings
- Support for construction of ECBC complaint buildings
- Efficient coordination with CPWD
- Capacity building of CPWD officials

➢ **Asian Waterbird Census (AWC)**

A waterbird survey conducted in the Upper Kuttanad region of Kerala has recorded 16,767 birds of 47 continental and local species. The survey, conducted as part of the annual AWC, has spotted three new species — Greater flamingo, Grey-headed lapwing, and Blue-cheeked bee-eater.

✓ Asian Waterbird Census is an annual event in which thousands of volunteers across Asia and Australasia count waterbirds in the wetlands of their country. This event happens every January. This event is coordinated by wetlands International and forms part of global waterbird monitoring programme called the International Waterbird Census (IWC).

✓ AWC was started in the year 1987. Its main focus is to monitor the status of waterbirds and the wetlands. AWC also aims to create public awareness on various issues concerning wetlands and waterbird conservation. Each year the census is carried out as a voluntary activity.

✓ In India, the AWC is annually coordinated by the Bombay Natural history Society (BNHS) and Wetlands International.

➢ **India Can't Handle more big Cat**

With shrinking habitats, experts opine that India has almost neared its capacity to manage tigers. Therefore, ***India must also prepare for a new challenge — of reaching the limits of its management capacity***.

- ✓ India's current capacity to host tigers ranges from 2,500-3,000 tigers. Officially, India had 2,226 tigers as of 2014. An ongoing census is expected to reveal an update to these numbers.
- ✓ 25-35% of India's tigers now lived outside protected reserves.
- ✓ Recent attempts at translocating tigers to unpopulated reserves, such as Satkosia in Orissa, have ended badly, with one of the tigers dying.

➢ Sarus crane

Sarus crane, whose numbers pushed to the edge by habitat degradation and human callousness, now seems to be getting a new lease of life in Uttar Pradesh, where it enjoys the status of official State bird.

- ✓ The Sarus (Grus antigone) is **the tallest flying bird in the world**.
- ✓ It is also **India's only resident breeding crane**.
- ✓ **IUCN status-** 'vulnerable'.

➢ CITES – Washington Convention

- ✓ India has proposed to remove ***rosewood (Dalbergia sissoo) from Appendix II of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)***, a multilateral treaty to protect endangered plants and animals.
- ✓ **The species is currently part of Appendix II of CITES** that has species not necessarily threatened with extinction, but in which trade must be controlled to avoid utilization incompatible with their survival. But, India doesn't want that for rosewood.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES):

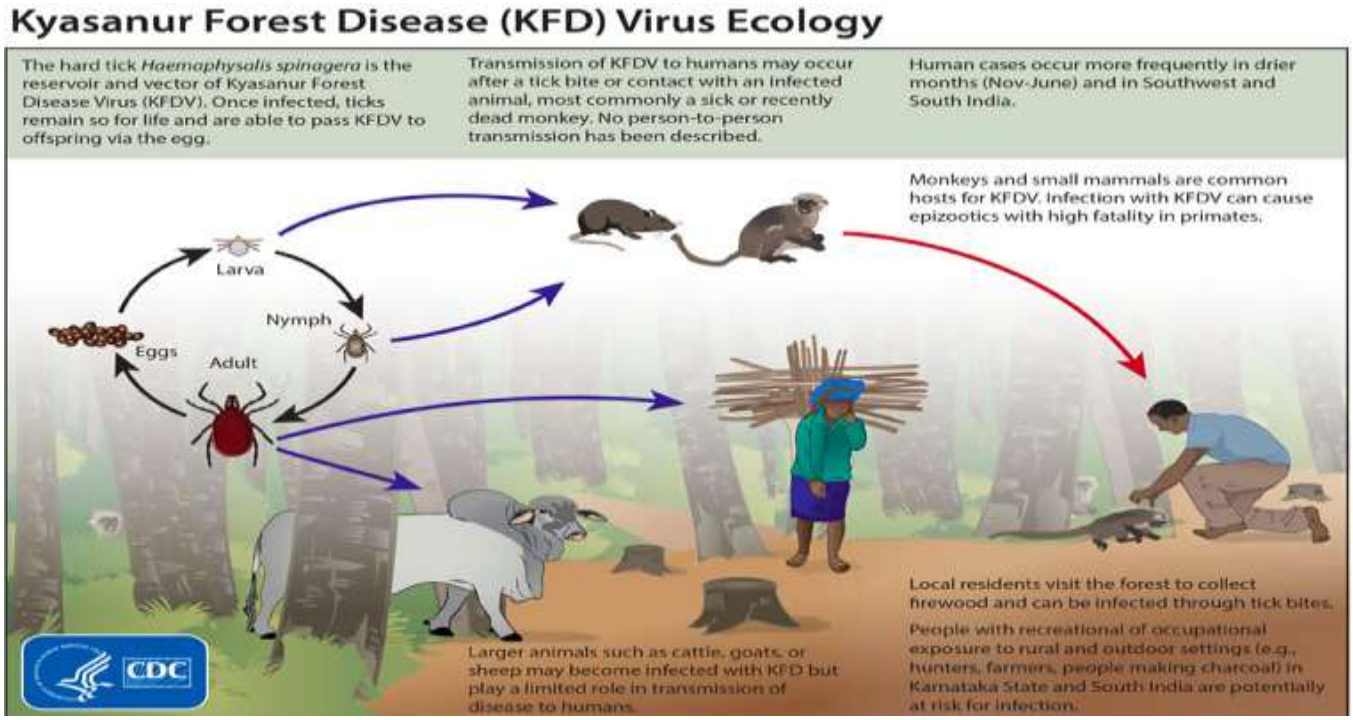
- It is **an International agreement to regulate worldwide commercial trade in wild animal and plant species**. **It also restricts trade in items made from such plants and animals**, such as food, clothing, medicine, and souvenirs
- It was signed on March 3, 1973 (**Hence world wildlife day is celebrated on march 3**).
- It is administered by the **United Nations Environment Programme (UNEP).**
- **Secretariat —** Geneva (Switzerland).
- **CITES is legally binding** on state parties to the convention, which are obliged to adopt their own domestic legislation to implement its goals.

➢ Kyasanur Forest Disease(KFD)

Karnataka is currently reeling under an outbreak of monkey fever or Kyasanur forest disease (KFD). Authorities are taking measures, including vaccination to combat the disease and spread of it in the state.

- ✓ ***KFD is caused by the Kyasanur Forest Disease Virus (KFDV)***. The virus was identified in 1957 when it was isolated from a sick monkey from the Kyasanur Forest. Since then, between 400-500 humans cases per year have been reported.
- ✓ ***Hard ticks (Hemaphysalis spinigera) are the reservoir*** of the KFD virus and once infected, remain so for life.

- ✓ ***Rodents, shrews, and monkeys are common hosts*** for KFDV after being bitten by an infected tick. KFDV can cause epizootics with high fatality in primates.
- ✓ **Transmission to humans** may occur after a tick bite or contact with an infected animal, most importantly a sick or recently dead monkey. No person-to-person transmission has been described.
- ✓ **The disease as of now is stated to be transmitted through monkeys**. Large animals such as goats, cows, and sheep may become infected with KFD but play a limited role in the transmission of the disease.
- ✓ **These animals provide the blood meals** for ticks and it is possible for infected animals with viremia to infect other ticks, but transmission of KFDV to humans from these larger animals is extremely rare. Furthermore, there is no evidence of disease transmission via the unpasteurised milk of any of these animals.



- ➢ **Bahuda rookery**

The beach at the Bahuda river mouth in Ganjam district is being developed as a possible olive ridley mass nesting site. **The Bahuda rookery is located around 20 km to the south of Rushikulya rookery coast**, a major mass nesting site of olive ridleys on the Indian coastline.

SPACE

- **Using data from NASA's Kepler Space telescope as well as ground-based observatories, scientists have discovered over 100 new exoplanets from 227 exoplanet candidates**

- Seven of the confirmed exoplanets have ultra-short orbital periods less than 24 hours. The formation process of exoplanets with such short orbital periods is still unclear.
- If a planet crosses in front of its parent star, then the observed brightness of the star drops by a small amount. The Kepler Space Telescope detected many exoplanets using this method.
- However, such dimming phenomena could be caused by other reasons. Therefore, confirmation that the phenomena are really caused by exoplanets is very important
- The Kepler space telescope experienced mechanical trouble in 2013, which led to a successor mission called K2. Astronomers around the world are competing to confirm exoplanets suggested by the K2 data.
- Launched in 2009, Originally positioned to stare continuously at 150,000 stars in one star-studded patch of the sky in the constellation Cygnus, Kepler took the first survey of planets in our galaxy and became NASA's first mission to detect Earth-size planets in the habitable zones of their stars.

- **After a two-year journey, a NASA spacecraft OSIRIS -REx arrives at its target asteroid**

- OSIRIS-REx Discovers Water on Asteroid Bennu. When OSIRIS-REx aimed the spectrometers at Bennu, they spotted **signs of hydrogen and oxygen molecules bonded together in groups called hydroxyls.**
- That doesn't mean water is *still* present on Bennu. The asteroid is too small to actually hold any liquid water, and if it ever did have water, that would likely have been when it was part of a much larger parent asteroid.

For Details on **OSIRIS Rex and Bennu** refer to the **Quick Revision For Prelims**(Jun-Nov, 2018) **edition.**

- **India's heaviest communication satellite GSAT-11 launched successfully from French Guiana**

- The **5,854-kg GSAT-11** will provide high data rate connectivity to users of Indian mainland and islands through 32 user beams in Ku-band and 8 hub beams in Ka-band**.**
- **GSAT-11** will boost the broadband connectivity to rural and inaccessible Gram Panchayats in the country coming under the Bharat Net Project, which is part of Digital India Programme.
- **The Bharat Net Project** aims to enhance the public welfare schemes like e-banking, e-health, e-governance among others.

- **Soyuz: first manned mission to ISS since October failure**

- **A Soyuz rocket** carrying Russian, American and Canadian astronauts took off from Kazakhstan and reached orbit, in the first manned mission since a failed launch in October.
- The **Soyuz is the only means of reaching the ISS since** the U.S. retired the space shuttle in 2011.

➢ **ExseedSAT 1, India's 1st private satellite enters space**

- After several reschedules, Micro Satellite **ExseedSAT 1** hit the final frontier hitching a ride on California based SpaceX's Falcon 9 rocket, becoming the **first Indian private satellite to enter space.**
- With the satellite safely in orbit, **Exseed Space** becomes the first Indian privately-funded startup to successfully send a satellite into space.
- This satellite is freely available for all radio amateurs across the world. It is an open radio transponder that works on ham radio frequencies. One has to pay just Rs 100 license from the WPC to communicate through this satellite.
- The satellites of this form are called Cubesats.Typically they are 10 cm across. **ExseedSAT1 aims to provide a major boost to private radio operators after ISRO-manufactured micro-satellite**, **HAMSAT, ceased operations about four years ago**. The amateur radio services provide vital communication links during natural disasters.

➢ **VISIONS-2 Provides a Look at Earth's Escaping Atmosphere**

- ` The **Visualizing Ion Outflow via Neutral Atom Sensing-2** or VISIONS-2 rockets is looking at atmospheric escape, the process whereby Earth is slowly leaking its atmosphere into space.
- Understanding atmospheric escape on Earth has applications all over the Universe — from predicting which far off planets might be habitable, to piecing together how Mars became the desolate, exposed landscape it is today.
- The aurora borealis is of keen interest to the VISIONS-2 team, but not just for its otherworldly glow. The aurora play are fundamental drivers in the process of atmospheric escape, whereby planets, including Earth, gradually leak their atmosphere into space.

The aurora are formed when energetic electrons, accelerated in the electric and magnetic fields in near-Earth space, crash into and excite atmospheric gases, which emit bright hues of red, green, and yellow as they relax back to a lower energy state.

➢ **IISER Kolkata team develops method to simulate, predict solar activity over ten years**

- Astronomers have observed sunspots on the surface of the sun for nearly 400 years. It is known that sunspots follow a cyclic pattern of growing in number and disappearing in approximately 11 years, known as the sunspot cycle or the sun's activity cycle. We are currently in the 24th sunspot cycle since the observation began in 1755.
- A team of researchers from IISER Kolkata have developed a way of predicting the intensity of activity in the next solar cycle (approximately from 2020 to 2031) using data spread over the last 100 years.
- Contrary to other calculations, they find that the sun's activity would not dip during the next cycle, but it would be similar to the current cycle, perhaps even stronger. They expect the cycle to peak around 2024.
- The researchers simulate the behaviour of the sun using magnetic field evolution models and observational data. They simulate solar activity, and using inputs from observed data from one cycle, predict the behaviour of the sun over the next cycle, about ten years in advance.
- **An important reason to understand sunspots is that they affect space weather. This refers to the effect of radiation, particle flux and magnetic flux in the region around the sun**. During

extreme events, space weather can affect electronics-driven satellite controls, communications systems, air traffic over polar routes and even power grids. The other reason sunspots are interesting is the belief that they are correlated with climate on earth.

- **Sunspots** are temporary phenomena on the Sun's photosphere that appear as spots darker than the surrounding areas. They are regions of reduced surface temperature caused by concentrations of magnetic field flux that inhibit convection. Sunspots usually appear in pairs of opposite magnetic polarity. Their number varies according to the approximately **11-year solar cycle.**
- The **Maunder Minimum**, also known as the "prolonged sunspot minimum", is the name used for the period around 1645 to 1715 during which sunspots became exceedingly rare

➢ **Agni-5 test fired successfully**

- Agni-5 is a **three-stage missile** and is 17 metre tall and 2 metre wide. This is the **seventh trial** of the indigenously-developed surface-to-surface missile.
- It is capable of carrying **1.5 tonnes of nuclear warheads.**
- India has in its armoury the Agni missile series - Agni-1 with a range of 700 km, Agni-2 with a range of 2,000 km, Agni-3 and Agni-4 with 2,500 km to more than 3,500 km range.
- The missile has a **payload capacity of 1,500 kg** of high-explosive warhead and once inducted in the military, **India will join an exclusive club of countries like the US, Russia, China, France, and Britain** which have intercontinental ballistic missile capabilities.

➢ **Voyager 2 spacecraft enters interstellar space, becomes NASA's longest running mission**

- **NASA's Voyager 2** spacecraft now has **exited the heliosphere** -- the protective bubble of particles and magnetic fields created by the Sun.
- **Its twin, Voyager 1, crossed this boundary in 2012**, but **Voyager 2** carries a working instrument that will provide first-of-its-kind observations of the nature of this gateway into interstellar space. Voyager 2 launched in 1977, 16 days before Voyager 1.
- Mission operators still can communicate with Voyager 2 as it enters this new phase of its journey, but information - moving at the speed of light - **takes about 16.5 hours to travel from the spacecraft to Earth.**
- The spacecraft were **built to last five years** and conduct close-up studies of Jupiter and Saturn. However, as the mission continued, **additional flybys of the two outermost giant planets, Uranus and Neptune, proved possible**.
- Together, the two Voyagers **provide a detailed glimpse of how our heliosphere interacts with the constant interstellar wind flowing from beyond. Their observations complement data from NASA's Interstellar Boundary Explorer (IBEX), a mission that is remotely sensing that boundary.**
- NASA also is preparing an additional mission - the **upcoming Interstellar Mapping and Acceleration Probe** (IMAP), due to launch in 2024 - to capitalize on the Voyagers' observations.

➢ **Saturn is losing its rings that are headed for a graveyard**

- **NASA** research confirms that **Saturn is losing its iconic rings at the maximum rate**. The rings are being pulled into Saturn by gravity as a dusty rain of ice particles under the influence of Saturn's magnetic field.

- **Saturn's rings are mostly chunks of water ice ranging in size from microscopic dust grains to boulders** several yards (meters) across. Ring particles are caught in a balancing act between the pull of Saturn's gravity, which wants to draw them back into the planet, and their orbital velocity, which wants to throw them outwards into space.
- Though Saturn appears surrounded by a single, solid ring, actually several divisions exist. ***The rings are named alphabetically in the order of discovery***. Thus the main rings are, from farthest from the planet to closest, A, B and C. A gap 2,920 miles wide (**4,700 kilometers**),known as **the Cassini Division, separates the A and B rings**
- **Saturn is not the only planet in the solar system to have rings — Jupiter, Uranus and Neptune** also contain faint ring systems

➢ **Pluto craft to encounter Ultima Thule**

- **NASA's New Horizons spacecraft**, the same craft that made humanity's first-ever visit to Pluto in 2015, is approaching its next target, **a Kuiper Belt object a billion miles beyond Pluto, nicknamed 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 belongs to a class of Kuiper belt objects called the "cold classicals"**, which have nearly circular orbits with low inclinations to the solar plane.

➢ **China's Chang'e-4 is humanity's first probe to land on and explore the far side of the moon**

- China entered the elite fray of moon-faring nations by putting its Yutu ("Jade Rabbit") rover mission on the Moon in 2013. The mission, known as Chang'e-3, was part of a decades-long effort to study the Moon using a robotic spacecraft. Prior to Chang'e-3, the country had put a spacecraft in lunar orbit and had also crashed a vehicle into the lunar dirt.
- **The near side of the moon is "tidally locked" to always face the Earth**, and offers many flat areas for a spacecraft to touch down. But the **far side is mountainous and rugged. Landing on the far side of the moon(also called South Pole-aitken Basin) is tricky**, and away from a direct line-of-sight or communication with ground control on Earth.

➢ **ALMA finds protoplanetary disks depicting planet formation**

- Astronomers have obtained stunning, high-resolution images of **20 nearby protoplanetary disks**, depicting the birth of planets, using **Chile's Atacama Large Millimeter/submillimeter Array (ALMA).**
- The observations are part of a **major ALMA initiative known as the Disk Substructures at High Angular Resolution Project, or DSHARP campaign**.
- According to the researchers, the most compelling interpretation of these observations is that large planets, likely similar in size and composition to Neptune or Saturn, form quickly, much faster than current theory would allow.
- It may also help explain how smaller rocky planets manage to survive in the chaos of young systems.

- **Mars InSight lander seen in first images from space**

- A camera aboard NASA's Mars Reconnaissance Orbiter (MRO) has captured the image of the InSight lander, which recently touched down on the Red Planet.
- The InSight lander, its heat shield and parachute were spotted by **HiRISE (High Resolution Imaging Science Experiment)**
- This is not the **first time HiRISE has photographed a Mars lander**. InSight is based largely on **2008's Phoenix spacecraft**, which the camera aboard MRO captured on the surface of Mars as well as descending on its parachute.

- **Researchers have discovered a new exotic planet outside our solar system in the constellation Cassiopeia**

- Located 21 light years away from us, this planet -- dubbed **HD219134 b** -- has a mass almost five times that of Earth, which is considered a so-called super-Earth.
- Unlike the Earth, it most likely does not have a massive core of iron, but is rich in calcium and aluminium alongside magnesium and silicon. Hence cannot have Magnetic field like Earth.
- **Perhaps it shimmers red to blue like rubies and sapphires, because these gemstones are aluminium oxides which are common on the exoplane**t
- Because the inner structure is so different, these planets' cooling behaviour and atmospheres also differ from those of normal super-Earths.

- **China launches first satellite for space-based broadband project**

- **The Hongyun project**, started in September 2016, aims to build a space-based communications **network to provide broadband internet connectivity** to users around the world, especially those in the underserved regions.
- The spacecraft is tasked with verifying basic designs of Hongyun satellite and demonstrating low-orbit broadband communications technologies.

- **Yutu 2**

China has named the ***lunar rover***, successfully deployed to carry out a string of experiments on the far side of the moon, as ***'Yutu-2'***. The rover's touchdown is ***part of China Chang'e-4 lunar probe***.

- It follows the BeiDou Navigation Satellite System — China's homegrown Global Positioning System that started worldwide service last month.
- The rover has been programmed to **launch ground penetration radar that would help map the moon's inner structures**.

It would **also analyse soil and rock samples for minerals**, apart from **activating a radio telescope to search for possible signals from deep space**

- **China's BeiDou navigation satellite, rival to US GPS, starts global services**

- **The positioning accuracy of the system has reached 10 metres globally and five metres in the Asia-Pacific region**. Its velocity accuracy is 0.2 metres per second, while its timing accuracy stands at 20 nanoseconds.

- **Pakistan has become the first country to use the BeiDou** system ending its reliance on the Global Positioning System
- Named after the Chinese term for the 'Big Dipper', the BeiDou system started serving China in 2000 and the Asia-Pacific region in 2012. **It will be the fourth global satellite navigation system after the US GPS, Russia's GLONASS and the European Union's Galileo.**

➢ **Atos selected as technology partner to build supercomputers under India's NSM**

- **French IT services firm Atos** has been selected to build the supercomputers under India's Rs 4500 crore National Supercomputing Mission (NSM).
- This is a three-year contract and Atos would be deploying its energy efficient Direct Liquid Cooled BullSequana supercomputers.
- **The NSM is divided into two key tracks, build and buy**, which are being spearheaded by C-DAC and IISc Bangalore respectively**. Atos has won the contract for the 'build' part** of the NSM where it will partner with C-DAC on all three phases of the project.
- While Phase I involves the assembly of the supercomputers, in Phase II, certain components like the motherboards would be manufactured locally, and in the third phase, the supercomputer would be designed in India by C-DAC.
- **The NSM is being jointly implemented by the Department of Science and Technology (DST) and Department of Electronics and Information Technology (DeitY)** at an estimated cost of Rs.4500 crore over a period of seven years.
- High performance computing is important in order for India to make significant progress in various areas, from **weather forecasting to drug discovery to astrophysics and bioinformatics.**

➢ **Solar system's most distant object is 'Farout' pink dwarf planet**

- Scientists have discovered the most distant object known in our solar system, so remote and unusual they chose the **nickname "Farout" for the slow-moving, icy, pinkish dwarf planet about 120 to 130 times further from the sun than Earth.**
- There are roughly 50 dwarf planets in the solar system. **The biggest are Pluto**, with a diameter of about 1,470 miles (2,370 km), **and Eris**, with a diameter of about 1,445 miles (2,325 km).
- The second-most-distant observed Solar System object is **Eris.**

➢ **Robot revolts on the International Space Station**

- **Short for Crew Interactive MObile CompaniON, CIMON is an adorable basketball-sized robot who floats around the International Space Station.**
- **CIMON was developed by the European aerospace company Airbus on behalf of the German space agency**. The robot's AI is IBM's famous Watson system**.**

➢ **PSLV-C44 carried India's military satellite Microsat-R, students' payload Kalamsat**

- **In its 46th flight, the Polar Satellite Launch Vehicle (PSLV-C44) placed the 740-kg primary satellite Microsat-R**, an imaging satellite meant for military purposes, in a 274-km polar sun synchronous orbit.

- The stage four of the rocket with the Kalamsat, a 10-CM size cube and weighing 1.2 kg, was moved to a higher circular orbit so as to establish an orbital platform for carrying out experiments using the tiny payload.
- **Kalamsat is said to be the lightest satellite of India**.

BIOTECHNOLOGY

➢ **The Prime Minister dedicated the 6th International Rice Research Institute (IRRI), South Asia Regional Center (ISARC) to the nation**

- The Institute is built **at the campus of National Seed Research and Training Center (NSRTC) in Varanasi**.
- It will serve as a hub for **rice research and training** in **South Asia and SAARC region**. This first international Center in the eastern India is expected to harness and sustain rice production in the region.
- The International Rice Research Institute (IRRI) is an international agricultural research and training organization known for its work in developing rice varieties that contributed to the Green Revolution in the 1960s.

➢ **Zearalenone in Cereals**

- Zearalenone is ***a fungal toxin*** infesting cereals such as wheat, maize and barley. It attacks crops while they are growing, but can also develop when cereals are stored without being dried fully.
- While numerous studies document this toxin in cereals across the world, no data existed for India until now. This month, a Journal of Food Science study detected zearalenone in wheat, rice, corn and oats from markets in Uttar Pradesh.
- The Food Safety and Standards Authority of India does not impose maximum limits for zearalenone, though the European Union (EU) does.
- 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***. Each of these toxins has been associated with disease outbreaks

MEETS AND PROGRAMS

➢ **26th National Children's Science Congress (NCSC) Begins in Bhubaneswar**

- **Theme*:*** "Science, Technology and Innovation for a Clean, Green and Healthy Nation."
- **National Children's Science Congress (NCSC)** is a nationwide Science Communication programme started in the year 1993. It is a programme of National Council for Science and Technology Communication (NCSTC), Department of Science and Technology.
- **It is a forum children of the age-group of 10-17 years**, both from formal school system as well as from out of school, to exhibit their creativity and innovativeness and more particularly their ability to solve a societal problem experienced locally using by method of science.
- The entire **objective is to prompt children to think over societal problems**, ponder over the causes and subsequently, try and solve the same.

➢ **ISRO Young Scientist Programme**

- **Aim*:*** Inculcate and nurture space research fervour in young minds.
- It would be **a one month programme**. The students will be exposed to the practical experience of building small satellites.
- **Eligibility:** Mostly 8th standard passed out students will be given lecturers and access to research laboratories. 3 students from each of the 29 States and 7 Union Territories will be selected for the Young Scientist program.

➢ **ISRO launches Samwad with students on New Year Day**

As part of the enhanced outreach programme of **Indian Space Research Organization (ISRO)**, a new platform named **"Samwad with Students" (SwS)** was launched in Bengaluru. ISRO aims to **engage youngsters across India to capture their scientific temperament**.

➢ ***106th 'Indian Science Congress (ISC)'*** *session is being held at Jalandhar, Punjab*.

Theme: **Future India: Science and Technology**

➢ **UNNATI Programme**

- National space agency, the Indian Space Research Organisation (ISRO) has launched the ***UNNATI (UNispace Nano-satellite Assembly and Training by ISRO)*** programme at the U R Rao Satellite Centre, Bengaluru. ***UNNATI is a capacity building programme on nanosatellite development***.
- The UNNATI Programme is ***to commemorate the 50th anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE+50)***.
- UNNATI programme is planned to be ***conducted by U R Rao Satellite Centre (URSC)*** of ISRO for 3 years in 3 batches and will target to benefit 90 officials from 45 countries.

Objectives of UNNATI Programme

- ✓ To offer a simplified and increased exposure to satellite fabrication technologies, as part of the UNISPACE initiative.
- ✓ To provide theoretical course on satellite technology.
- ✓ To provide hands-on training to assemble, integrate and test a low cost, modular nano satellite.

IT AND ICT

➢ **Cabinet approves National Mission on Interdisciplinary Cyber-Physical Systems**

- National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) is to be implemented by Department of Science &Technology at a total outlay of Rs. 3660 crore for a period of five years.
- The Mission addresses the ever increasing technological requirements of the society, and takes into account the international trends and road maps of leading countries for the next generation technologies
- The NM-ICPS is a comprehensive Mission which would address technology development, application development, human resource development & skill enhancement, entrepreneurship and start-up development in CPS and associated technologies.

- The Mission aims at establishment of 15 numbers of Technology Innovation Hubs (TIH), six numbers of Application Innovation Hubs (AIH) and four numbers of Technology Translation Research Parks (TTRP). These Hubs & TTRPs will connect to Academics, Industry, Central Ministries and State Government in developing solutions at reputed academic, R&D and other organizations across the country in a hub and spoke mode
- **Cyber-physical systems (CPS) integrate** sensing, computation, control and networking **into physical objects and infrastructure,** connecting them to the Internet and to each other.
- Potential applications: **Driverless cars** that communicate securely with each other **on smart roads**, Sensors in the home to **detect changing health conditions,** improving **agricultural practices** and enabling scientists to address issues arising out of climate change,etc.

➢ NITI Aayog Launches Global Hackathon On Artificial Intelligence

- **NITI Aayog** is now partnering with **Perlin – a Singapore-based AI start up - to launch the 'AI 4 All Global Hackathon'**, and is inviting developers, students, start-ups and companies to develop AI applications to make significant positive social and economic impact for India**.**
- **The challenge question seeks to develop solutions in Distributed Computing and Privacy Preserving techniques**, such as multi-party computation, in AI. The objective of this Hackathon is to promote awareness and subsequently develop solutions that deliver the twin benefit of efficient computing to address the infrastructure challenges, while also not compromising on privacy of data for training AI algorithms.
- NITI Aayog organized **its first hackathon, 'MoveHack' in August,** on the sidelines of the Global Mobility Summit 2018, with the aim of garnering cutting-edge mobility applications.
- **The Hackathon will be run two stages with Stage One ending 15 January 2019 and Stage Two**, which will **only include shortlisted participants from the previous stage, will conclude on 15 March 2019**. The first stage will invite ideas for use cases of multi-party computation in areas such as Healthcare, Education, Agriculture, Urbanization, and Financial Inclusion. The second stage will call for these ideas to be matured and developed, with a focus on privacy preserving AI and distributed computing..

➢ Govt. notifies rules for in-flight, maritime mobile phone services

- Indian and foreign airlines and shipping companies operating in the country can provide in-flight and maritime voice and data services in partnership with a valid Indian telecom licence holder.
- The **in-flight and maritime connectivity (IFMC)** can be provided using telecom networks on ground as well as using satellites.
- In case of using satellite system for **providing IFMC**, the telegraph message shall be passed through the satellite gateway earth station located within India and such satellite gateway earth stations shall be interconnected with the NLD (national long distance) or access service or ISP licensee's network for further delivery of service.
- **The IFMC services** will be activated once the aircraft attains a minimum height of 3,000 metres in Indian airspace to avoid interference with terrestrial mobile networks.
- **The IFMC licences** will be granted against **an annual fee of Re 1 for a period of 10 years** and the permit holder will have to pay licence fees and spectrum charges based on revenue earned from providing services.

HEALTH, MEDICINES AND DISEASES

➢ *Neglected Tropical Diseases*

A new report has found that the ***Indian government is the fourth largest funder for research and development into neglected tropical diseases***.

- With USD 1,595 million, **the US government is the largest funder**.
- The Indian government, which contributes USD 72 million, comes 4th.
- Among other low and middle income countries (LMICs), India is credited with being responsible for the "lion's share" of public funding.
- India also records the strongest global growth in public funding for R&D on neglected diseases since 2009..

➢ World Malaria Report of 2018

- As per ***World Health Organisation's World Malaria Report of 2018***, India is the only country among the 11 highest-burden countries that saw substantial progress in reducing disease burden: it saw a 24% decrease in 2017 compared to 2016.
- At the East Asia Summit in 2015, **India pledged to eliminate the disease by 2030**. Following this public declaration, India launched **the five-year National Strategic Plan for Malaria Elimination**. This marked a shift in focus from malaria "control" to "elimination". The plan provides a roadmap to achieve the target of ending malaria in 571 districts out of India's 678 districts by 2022.

➢ Rajasthan Zika strain is endemic to Asia

According to a recent study by ***National Institute of Virology***,**Pune**, Zika virus that infected 159 people in an outbreak in Rajasthan last year, could have been circulating in India for several years and is endemic to Asia.

- ✓ The finding that the outbreak was caused by an **endemic virus is quite important**. It suggests that people in the region may have been previously exposed to the virus, building herd immunity that may limit future outbreaks. It also states that the strain of virus found in India is different from that found in Brazil.
- ✓ While this is good news, because it implies that a portion of the population could be immune, it could also mean that **Zika-related birth defects such as microcephaly were occurring even before the virus was first detected in India**

➢ Triple drug therapy for *lymphatic filariasis*

A pilot ***project to administer triple drug therapy with the long term aim of eradicating lymphatic filariasis*** was recently launched in Nagpur, Maharashtra. ***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

- The World Health Organization (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 being used in this therapy will help control adult worms of lymphatic filariasis***. Micro filariasis, which is produced by adult worms, is the cause of swollen leg. Previously the adult worms were sterilized by drugs and remained inactive for a year. Now that period will increase to two *years.*

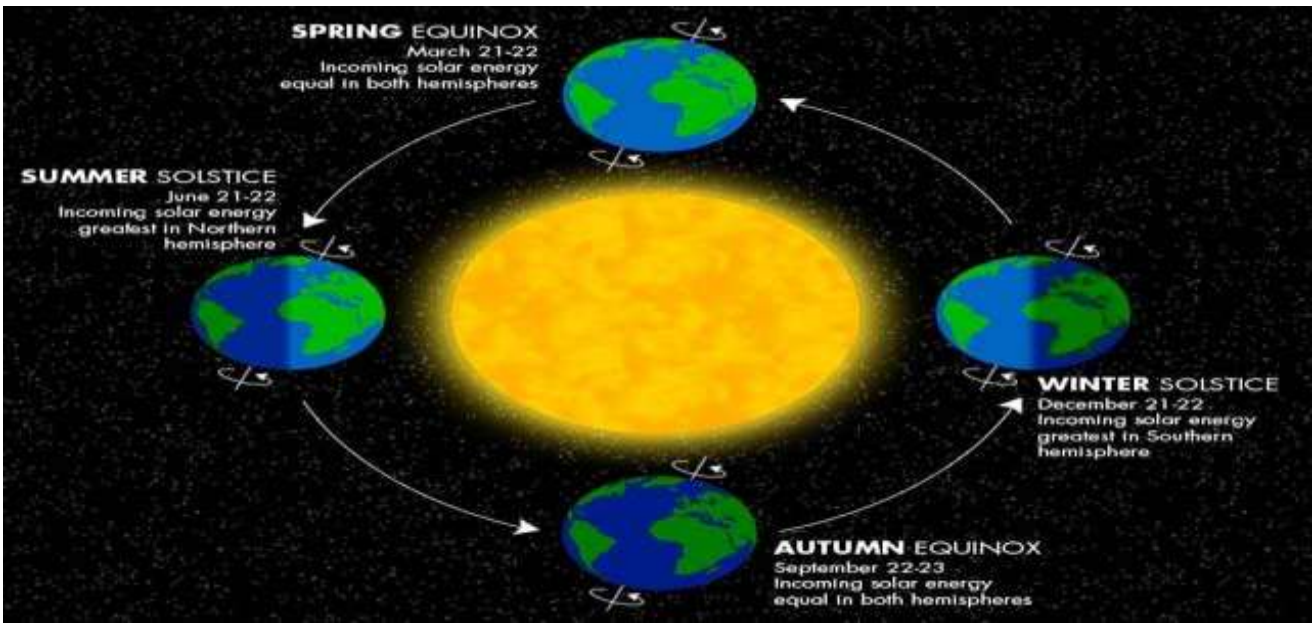
The plan is to administer these drugs for two consecutive years. The life of the adult worm is hardly four years, so it would die a natural death without causing any harm to the person.

➢ **GOA Liberation Day**

- Goa recently celebrated the 57th Liberation Day. On this day, Goa attained independence from the 450-years of Portuguese rule.
- **Portuguese were the first ones to colonize parts of India and were the last to leave**. The Portuguese invaded Goa in the year 1510.
- Operation Vijay began on December 17, 1961. With a force of almost 30,000, the Indian attack overpowered the ill-prepared Portuguese 3,000 member army. At this point on December 18, the Portuguese Governor General Vassalo da Silva gave up control of the Union Territory of Goa, Daman and Diu. Three days after the attack began, Goa finally became a part of India

➢ **Winter solstice 2018: All you need to know about shortest day of the year**

- **The Winter solstice 2018 on December 21** marked the shortest day of the year in the northern hemisphere, when the sun appears at its most southern position, directly **overhead along the Tropic of Capricorn**. It also **marks the longest day** of the year in the Southern hemisphere
- **This is the day when Sun appears at its most southern position**. The solstice this year is also special because **it will be followed the next day by a full moon, called the Cold Moon**, which will be **visible in the night with the Ursid meteor shower.**
- The term **'solstice'** is derived from two Latin words "sol" which means sun, and "sistere", meaning



standstill. **The Sun seems to stand still in the winter sky, marking the shortest day and longest night of the year.**

➢ **Roadeo**

- The traffic police authorities of **Pune** are planning to introduce ***a robot named 'Roadeo' which would move around city roads, functioning as a quasi-traffic policeman and cautioning commuters about traffic rules and offences***.

- It is a first of its kind initiative in the entire country . If this pilot project turns out to be successful it would go a long way in easing the traffic management burden and reducing the workload of overburdened policemen

➢ **Central Indonesia's Mount Soputan erupts sending thick ash high into sky**

- **Mount Soputan**, located on the northern **part of Sulawesi island**, erupted ejecting columns of thick ash as high as 7,500 metres (24,606 feet) into the sky.
- Indonesia, an archipelago of more than 260 million people, is prone to earthquakes and volcanic eruptions due to its location on the Pacific "Ring of Fire."
- Soputan, which stands 5,853 feet tall, is one of Indonesia's more than 120 active volcanoes.
- **The Ring of Fire is a Pacific region home to over 450 volcanoes, including three of the world's four most active volcanoes** – Mount St. Helens in the USA, Mount Fuji in Japan and Mount Pinatubo in the Philippines. It is also sometimes called the circum-Pacific belt
- **The Ring of Fire is the result from subduction of oceanic tectonic plates** beneath lighter continental plates. **The area where these tectonic plates meet is called a subduction zone.**

➢ **Karnataka's Kaiga nuclear power plant (Unit-1) of Kaiga Generating Station (KGS-1) has once again made the country proud by creating a world record for the longest uninterrupted operation for 941 days(continuous operation since May 2016), thereby breaking the earlier record of 940 days by the United Kingdom.**

➢ Indonesia's climatology agency (BMKG) said undersea landslides triggered by an eruption of the Mount Anak Krakatau volcano, located about 50km offshore in the Sunda Strait between the islands of Java and Sumatra, may have triggered the tsunami.

➢ **Mount Etna's latest eruption has set off unusually powerful earthquakes in SicilyMount Etna is the largest active volcano in Europe and one of the world's most frequently erupting volcanoes. It is also the volcano with the longest record of continuous eruption.**

➢ ***The world's first television channel dedicated to human rights has been 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 Human Rights Channel aims to deliver hidden stories ignored by mainstream media into people's living rooms.

➢ **Earth Magnetic North pole is moving**

- Researchers say **Earth's *magnetic North Pole is 'skittering' away from Canada, towards Siberia*.**
- The problem has got so bad, researchers around the world are scrambling to update a global model of the fields. Called ***the World Magnetic Model***, it underlies all modern navigation, from the systems that steer ships at sea to Google Maps on smartphones.
- ***Liquid churning in Earth's core generates most of the magnetic field***, which varies over time as the deep flows change.
- In 2016, for instance, part of the magnetic field temporarily accelerated deep under northern South America and the eastern Pacific Ocean. Satellites **such as the European Space Agency's Swarm mission tracked the shift.**

➢ **Goa celebrated its 52nd 'Asmitai Dis' (Identity Day) or Opinion Poll Day on January 16**.

- ***It was on this date in 1967 that Goans voted against merging with Maharashtra and chose to remain a Union Territory***. Though referred to as an 'opinion poll', the vote was in fact a plebiscite.
- ***Soon after Goa's liberation from colonial Portuguese rule in 1961***, murmurs began of a merger with Maharashtra on grounds of cultural similarity and the argument that Konkani was a dialect of Marathi and not an independent language. With several Indian states having been demarcated on a linguistic basis, the demand split the people of Goa into those who backed Konkani and wanted to remain independent of Maharashtra, and those who were in favour of Marathi and wanted to merge.
- ***In December 1966, Parliament passed the Goa, Daman and Diu (Opinion Poll Act), 1966***, "to provide for the taking of an opinion poll to ascertain the wishes of the electors of Goa, Daman and Diu with regard to the future status thereof and for matters connected therewith".

➢ **Highlights of Republic Days**

✓ **Chief Guest: President Cyril Ramaphosa, President of the Republic of South Africa**. This is ***the second time a South African leader is Chief Guest at Republic Day*** — Nelson Mandela was the chief guest in 1995.

✓ ***Theme:*** '**life of Gandhi' which is a tribute to the father of the nation Mahatma Gandhi on his 150th birth anniversary.**

✓ 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 will lead the Army services corps**.

✓ **An all-women contingent of Assam Rifles, India's oldest paramilitary force**, participated for the first time. The contingent was opened for women in 2012.

- ✓ The weapons which were 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 Defence Research and Development Organisation (DRDO).
- ✓ For the first time in the Republic Day parade, An-32 aircraft flew using a **mix of traditional and biofuel**.
- ✓ Four former **Indian National Army (INA)** soldiers participated for the first time in the parade. INA was an armed force formed by Indian nationalist **Rash Behari Bose in 1942** in Southeast Asia during World War II.
- ✓ **`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**.

- ➢ A volcano- ***Mt Shindake*** has erupted on ***Kuchinoerabu Island of Japan***. Kuchinoerabu Island belongs to Kagoshima Prefecture, Japan. The entire island lies within the borders of the Kirishima-Yaku National Park.

- ➢ **10 % reservation for economically backward upper castes in government jobs and education**
- ✓ Parliament passed 124 constitutional Amendment bill for 10 % reservation for economically backward upper castes in government jobs and education. Bill would amend article 15 and article 16 of the constitution
- ✓ Eligibility Criteria
- People who earn less than Rs 8 lakh annually
- People who have agricultural land below five acres
- For availing the quota, a residential house should be below 1000 sq ft.
- The residential plot should be below 100 yards in notified municipality
- The residential plot below 200 yards should be in a non-notified municipality.

- ➢ **Sardar Patel Award for National Integration**
- **Prime Minister Narendra Modi has announced the institution of a new award named after Sardar Vallabhbhai Patel**, which would be given every year for "outstanding efforts" in the field of furthering national integration.

- **List of Military Exercises (with India)**

Participating Nation	ARMY	NAVY	AIRFORCE
Russia	Indra		
USA, Japan		Malabar	
Japan	Dharma Guardian	Sahyog-Kaijin	
USA	Yudh Abhyas, Vajra Prahar		Red Flag, Cope India
China	Hand in Hand		
France	Shakti	Varuna	Garuda
UK	Ajeya Warrior	Konkan	Indradhanush
Nepal	Surya Karan		
Bangladesh	Sampriti		
Sri Lanka	Mitra Shakti	SLINEX	
Thailand	Maitree		Siam Bharat
Indonesia	Garuda Shakti	CORPAT	
UAE			Desert Eagle
Oman		Naseem AlBahr	Eastern Bridge
Kazakhstan	Prabal Dostyk		
Mongolia	Nomadic Elephant		
Seychelles	LAMITIYE		
Singapore	Bold Kurukshetra	SIMBEX	
Australia		Ausindex	
Kyrgyzstan	Khanjar		
ASEAN +	Force 18		
Maldives	Ekuverin		
South Africa, Brazil		IBSAMAR	

- **Indexes and India's Rankings**

Index	Published by	India's Ranking (2017)
Global Competitiveness index	World Economic Forum	58
Global Innovation index	Cornell University, INSEAD and WIPO	57
Global Peace index	Institute of Economics and Peace	136
Human Development index	United Nation Development Programme (UNDP)	130
World Happiness Index	United Nation Sustainable Development Solutions Network	133
Prosperity Index	Legatum Institute	94
Ease of Doing Business index	World Bank	77
Corruption Perception Index	Transparency International	81
Global Talent Competitiveness index	Global business school INSEAD in partnership with Adecco Group and Human capital Leadership Institute (HCLI) of Singapore.	81
Inclusive development Index	World Economic Forum	62
Climate Change Performance Index	German NGO and Climate Action Network Europe	14
Logistics Performance Index	World Bank's	35
World Press Freedom Index	Reporters Sans Frontières (RSF)	138
Sustainable Development Goals Index	Sustainable Development Solutions Network(SDSN)	116
International Intellectual Property Index	US Chamber of Commerce's GIPC	44
Global Hunger Index	International Food Policy Research Institute (IFPRI)	103
Global Human Capital Index	World Economic Forum	158
Travel and tourism Competitiveness Index	World Economic Forum	40

- **Space Missions in News**

MISSION	OBJECTIVE
HAYABUSA 2	Launched by JAXA,Japan, is enroute to **asteroid** 162173 Ryugu.
OSIRIS-REx	Launched by NASA, is en route to **asteroid** 101955 Bennu.
ARTEMIS P1/P2	Launched by NASA, are studying the effect of the solar wind on the **Moon**. Originally launched as Earth satellites, they were later repurposed and moved to lunar orbit.
Lunar Reconnaissance Orbiter	Launched by NASA, is engaged in **lunar** mapping intended to identify safe landing sites, locate potential resources on the **Moon**, characterize the radiation environment, and demonstrate new technology.
Akatsuki	The first **Japanese** Venusian probe. Also known as *Planet-C* and *Venus Climate Orbiter*, ***Akatsuki*** failed to enter Venusian orbit in December 2010. It continued to function and **entered Venus orbit in 2015**.
2001 Mars Odyssey,	A tribute to the classic novel and film, is one of six currently active human-made Mars satellites. It is continuing its extended mission to map the surface of Mars and also acts as a relay for the **Curiosity** and **Opportunity rovers**. Launched by NASA.
Mars Express	**ESA**; Mars orbiter designed to study the planet's atmosphere and geology, search for sub-surface water, and deploy the **Beagle lander**.
Mars Reconnaissance Orbiter	The second **NASA** satellite orbiting Mars. It is specifically designed to analyze the landforms, stratigraphy, minerals, and ice of the red planet.
Curiosity Rover	Part of NASA's Mars Science Lab (MSL),is searching for evidence of organic material on **Mars**, monitoring methane levels in the atmosphere, and engaging in exploration of the landing site at **Gale Crater**.
Mangalyaan	Is the first **Indian** interplanetary space probe. It was successfully inserted into orbit of Mars on 24 September 2014.
Mars Atmosphere and Volatile EvolutioN Mission (MAVEN)	It is a space probe developed by NASA designed to study the Martian atmosphere while orbiting Mars. Mission goals include determining how the planet's atmosphere and water, presumed to have once been substantial, were lost over time.
Trace Gas Orbiter (ExoMars 2016)	Launched by ESA is carrying the lander Schiaparelli ,scheduled to use atmospheric braking for some months before commencing data collecting operations.
Dawn	NASA;successfully entered asteroid Vesta's orbit in July 2011. There it studied Vesta until September 2012, when it departed for dwarf planet Ceres

Juno	Launched by NASA to scientifically investigate Jupiter andis in polar orbit around Jupiter .
Cassini Orbiter	NASA,Began studying Saturn and its moons after passing Venus and Jupiter and deploying the Huygens Landing Probe to Titan. It is primarily investigating Saturn's rings, its magnetosphere and the geologic composition of its satellites; **ended in 2017**
New Horizons	**NASA;Is the first spacecraft to study Pluto up close**, and ultimately the Kuiper Belt. It is the fastest artificially-accelerated object and will be the fifth probe to leave the solar system.
Voyager 1	NASA;Is currently the farthest man-made object from Earth, as well as the **first object to leave the Solar System** and cross into interstellar space. **It was originally tasked with investigating Jupiter and Saturn, and the moons of these planets**.
Voyager 2	**Has left the solar system**. Its mission to study all four gas giants. Scientists are now using Voyager 2 to learn what the solar system is like beyond the heliosphere.
Rosetta	Operated by ESA, is orbiting the comet 67P/Churyumov–Gerasimenko. On November 12, 2014, a lander was successfully deployed for further investigation. Mission ended on 30 September 2016, when the probe landed onto the comet's surface.
Messenger	**NASA**;was **studying Mercury**. It is **only the second probe to do so and is the first to orbit the planet.** Technologically, it is far superior to its **1975 predecessor**, **Mariner 1**0. Having previously passed Earth once, Venus twice and Mercury three times, it entered orbit in March 2011. Mission ended on 30 April 2015, when the probe crashed onto the planet's surface.