IAS GATEWAYY

AN INITIATIVE BY VETRII IAS

www.iasgatewayy.com

PIB

NOVEMBER - 2019

Index

1. INDIAN SOCIETY & POLITY

2. GOVERNANCE

3. SCIENCE & TECHNOLOGY

4. ECONOMY

5. GEOGRAPHY & ENVIRONMENT

6. INTERNATIONAL RELATIONS

7. INTERNAL SECURITY & DISASTER MANAGEMENT

1. INDIAN SOCIETY & POLITY

1. Kung Fu Nuns of the Drukpa Order

Why in News?

- Union Minister of State for Tourism and Culture met the Kung Fu Nuns of the Drukpa Order.
- The Kung Fu Nuns recently received the Asia Society's prestigious Game Changer Award in New York for their path-breaking work to empower women and dismantle gender stereotypes in the Himalayas.

The Kung Fu Nuns:

- The Kung Fu Nuns are a strong community of 700 nuns and growing, with a thousand-year-old Drukpa legacy.
- They represent a new generation of Buddhists who use their teachings to take real action and effect meaningful change in the world by promoting gender equality and environmentalism.
- The Nuns use Jigme as their first name and the meaning of Jigme is 'fearless'.
- With this recognition, the Kung Fu Nuns join the likes of iconic Indian leaders Indra Nooyi, Mukesh Ambani, and Dev Patel, who have also been honored by the Asia Society.

Drukpa Order:

- The Kung Fu Nuns are the fearless daughters of India who represent a new generation of Buddhists using spirituality to inspire real-life action & impact.
- Harnessing the ancient martial art to build strength, promote equality, and improve communities, they are inspiring young girls to break stereotypes and be their own heroes.
- They belong to the Drukpa Lineage, a thousand-year-old Buddhist tradition that began in the Himalayas. The Gyalwang Drukpa, the spiritual leader and founder of the Drukpa order, encouraged his nuns to train in Kung Fu to build confidence as leaders.
- In doing so, he flouted centuries of Buddhist tradition that barred nuns from physical exercise. They are the only Buddhist nuns in the world to practice Kung Fu. The nuns use their martial arts expertise to challenge gender roles in India's conservative culture.

Asia Society Game Changer Awards:

- Founded in 1956, the Asia Society is a nonpartisan, non-profit educational institution.
- It holds offices in Hong Kong, Houston, Los Angeles, Manila, Melbourne, Mumbai, NYC, San Francisco, Seoul, Shanghai, Tokyo, Washington DC and Zurich.

- The society is dedicated to promoting mutual understanding and strengthening partnerships among people, leaders and institutions of Asia and the United States in a global context.
- Each year, the Asia Society honour individuals, organizations, or movements that have inspired, enlightened, and shown true leadership in areas that reflect Asia Society's core pillars of policy and business, arts and culture, and education.

2. Suranga Bawadi

Why in News?

- Suranga Bawadi, an integral part of the ancient Karez system of supplying water through subterranean tunnels built during Adil Shahi era in Vijayapura, is now set to get funding for restoration.
- A New York-based non-governmental organisation has included it in the World Monument Watch list for 2020 along with 24 other monuments from across the world.
- With this, the Suranga Bawadi is expected to get funds for restoration within the next two years. The NGO would also coordinate with the authorities concerned for restoration and create public awareness on its importance.

Karez System:

- Karez is a method of irrigation in which groundwater is tapped by a tunnel.
- After running for some distance, the tunnel comes out in the open and the water is conducted to the command area.
- According to historians, the Adil Shahis built the magnificent underground system to supply water to the city, which had a population of nearly 12 lakhs then.
- Though the Karez system was built in the 16th century by Ali Adil Shah–I, his successor, Ibrahim Adil Shah–II, brought in several changes by adding more structures to strengthen it.

World Monuments Fund:

- The monument has been selected under the 'Ancient Water System of the Deccan Plateau' by World Monuments Fund [the NGO], which monitors restoration of ancient monuments across the globe.
- It works in collaboration with the local stakeholders, including the district administration, the ASI, and local explorers of ancient monuments, in highlighting the need for the restoration of ancient monuments.

World Monuments Watch:

- Every two years WMF publishes the World Monuments Watch (formerly the World Monuments Watch List of 100 Most Endangered Sites). Since the first list was compiled in 1996, this program has drawn international attention to cultural heritage sites around the world threatened by neglect, vandalism, armed conflict, commercial development, natural disasters, and climate change. Through the World Monuments Watch, WMF fosters community support for the protection of endangered sites and attracts technical and financial support for the sites.

3. Jallianwala Bagh National Memorial (Amendment) Bill, 2019

Why in News?

- Jallianwala Bagh National Memorial (Amendment) Bill, 2019 has been passed by the Parliament after it was passed in Rajya Sabha today.

Jallianwala Bagh National Memorial (Amendment) Bill:

- It seeks to make apolitical the trust that runs Jallianwala Bagh National Memorial by removing the clause pertaining to the President of INC as a permanent member of the trust. The Bill also amends to include the Leader of Opposition recognised as such in the House of the People (Lok Sabha). However, there is no such Leader of Opposition, then the Leader of the single largest Opposition Party in that House as a member of the trust.
- The Bill also amends that a nominated trustee may be terminated before the expiry of the period of five years by the Central Government.

4. National Mission on Cultural Mapping (NMCM)

Why in News?

- The Minister of State of Culture and Tourism provided certain information regarding the NMCM in the Lok Sabha.

National Mission on Cultural Mapping:

- National Mission on Cultural Mapping (NMCM) has been set up by the Ministry of Culture in 2017. Mission will compile data of artists, art forms & geo location with inputs from Central Ministries, State Governments & art/culture bodies.
- Specially designed data capture form with technical collaboration of National E-Governance Division (NEGD)/Ministry of Electronics and Information Technology (MEITY) has been formulated for data collection.

- Data from art & culture Academies of the Ministry of Culture has been collected and will be entered into database after due correction.

5. 'Destination North East' Festival

Why in News?

- The Union Minister of State (Independent Charge), Ministry of Development of North Eastern Region (DoNER) will inaugurate the 'Destination North East' Festival in Varanasi, Uttar Pradesh.

Highlights:

- The festival will be held in November 2019 for four days.
- The festival is being organised by the Ministry of Development of North Eastern Region (DoNER), Government of India.
- The Previous editions of 'Destination North East' were held in Delhi and Chandigarh.
- Destination NE 2019 will provide live experience to the audience. All 8 NE states will be present at the event along with their handicrafts, handloom, organic products and cultural troupes.
- The idea of organising such events is to bring the rest of India closer to the North East and to have experience of the rich culture of the North East.
- During the festival, visitors will have live experiences of the artisans and artists from the NE states working on their looms and crafts, performing their songs and dances in the open stage during the day.
- Indigenous games will also be performed where visitors can also participate.
- Live kitchens with recipes from NE and Uttar Pradesh will be serving delicacies throughout the event.
- The Ganga and Brahmaputra basins offer striking similarities in terms of ancient culture, diverse handlooms and silk products, spiritual heritage and vibrant tourist hubs. Therefore, Varanasi was the natural choice for hosting the Destination North East 2019.
- Given the importance of NE with respect to organic products, food processing, tourism, water development, seminars will be held on these subjects with participation of experts in the respective fields.

2. GOVERNANCE

1. UNESCO Creative Cities Network (UCCN)

Why in News?

- UNESCO has designated Mumbai as a member of UNESCO Creative Cities Network (UCCN) in the field of FILM and Hyderabad in the field of GASTRONOMY, on the occasion of World Cities Day 2019.

Highlights:

- By joining the UNESCO Creative Cities Network (UCCN), the cities pledge to share their best practices and develop partnerships involving public and private sectors as well as civil society to strengthen creation, production, distribution and dissemination of cultural activities, goods and services.
- The Network Covers seven creative fields: crafts and folk arts, media arts, film, design, gastronomy, literature and music.
- Previously, 3 Indian cities were recognized as members of UCCN, namely- Jaipur-Crafts and Folk Arts (2015), Varanasi-Creative city of Music (2015), Chennai-Creative city of Music (2017).
- Ministry of Culture is the nodal Ministry of Government of India for all matters in UNESCO relating to culture.

UNESCO Creative Cities Network (UCCN):

- The UCCN, created in 2004, is a network of cities which are thriving, active centres of cultural activities in their respective countries.
- The UNESCO Creative Cities Network now counts a total of 246 cities.
- The member cities that form part of the Network come from all continents and regions with different income levels and populations.

2. Three Apps developed by Employees' Provident Fund Organization (EPFO) launched

Why in News?

- On the 67th Foundation Day of EPFO, 3 Apps: Uan Registration, E-Inspection and DIGI Locker to Benefit EPF Subscribers and Stakeholders were launched.

Highlights:

- **Online Facility for UAN generation by worker:**

- ✓ Any workers can obtain Universal Account Number (UAN) directly on EPFO website which enrolls them for PF, Pension and Life Insurance benefits.
- ✓ This is in the direction of ease of living and ensuring universal social security.

- **EPS Pensioner's PPO in DigiLocker Application (APP):**
  - ✓ EPFO integrates with DigiLocker of National e-Governance Division to create depository of electronic Pension Payment Orders (PPOs) which is accessible to individual pensioners.
  - ✓ This is a move towards paperless system and ease of living for pensioners.

- **e-Inspections:**
  - ✓ It is the Digital interface of EPFO with employers.
  - ✓ The E-Inspection Form would be available in user login of employers not filing ECR which enables employer to inform either closure of business or unpaid dues with proposal for payment.
  - ✓ It will nudge employers for compliant behavior and prevent undue harassment of non-willful defaulters and eliminate inspector raj.

Employees' Provident Fund Organisation (EPFO):

- The Employees' Provident Fund Organisation, is an organization tasked to assist the Central Board of Trustees, a statutory body formed by the Employees' Provident Fund and Miscellaneous Provisions Act, 1952. It is under the administrative control of the Ministry of Labour and Employment. It is the biggest social security organization of the world covering around six crore active members and 65 lakh pensioners and maintaining around 22 crore accounts of workers with a fund of approximately 13 lakh crores.

3. Indian Railways expands e-office system

Why in News?

- The Indian Railways has adopted e-office system to make its work paperless, efficient, transparent and expeditious.

Highlights:

- It has also created 50000+ users in 58 establishments of Indian Railways which have adopted paperless work culture and also trained all the executives to handle the platform.
- The phase-I of NIC e-office suite has been completed ahead of time by RailTel under an MoU with Indian Railways in March 2019 with a mandate to complete the work by March 2020.

Advantages:

- Absolute transparency as anything once written on the file is archived.
- Monitoring mechanism to check as to where the files are held up, which would enable quick disposal of files and systematic, timely monitoring of pending files.
- e-Office foster's paper-less culture which will not only save operational cost but also reduce the carbon footprint.
- With the above advantages, Indian Railways will be changing the work culture for providing better services to the public.

4. Vigilance Awareness Week 2019

Why in News?

- Indian Railways has celebrated Vigilance Awareness Week 2019.

Vigilance Awareness Week 2019:

- The awareness week was observed in Oct-Nov 2019 for a week.
- The theme of the event was "Integrity – A Way of Life".
- The Central Vigilance Commissioner (CVC) administered an 'Integrity Pledge' to railway officials and released a vigilance magazine called 'Chetna Aahwan' incorporating articles, stories, poems and messages on relevant issues concerning vigilance.
- To spread the message of honesty and integrity amongst employees, passengers and other stakeholders, a unique method was adopted of circulating Integrity Pledge on a mass scale to railway employees, rail users and public at large through text messages and railway portal. More than 2 crore railway users received messages of the Integrity Pledge through the railway app. A special effort was made to organise internal and outreach activities in a number of schools and colleges in an effort to sensitize the youth.
- Apart from distributing pamphlets, newsletters and journals on the topic, many seminars/workshops/skits/ street plays, employees/family competitions (debate, quiz, etc.), human chain formation & Customer Grievance Redressal Camps were also conducted.
- Debates/essay competitions contests, etc. were organized in many educational institutions (schools and colleges).
- The Vigilance Awareness Week is being observed annually since 2000 around the first week of November.

5. ICEDASH & ATITHI Initiatives

Why in News?

- Union Ministry of Finance and Corporate Affairs unveiled two new IT initiatives – ICEDASH and ATITHI.

ICEDASH:

- ICEDASH is an Ease of Doing Business (EoDB) monitoring dashboard of the Indian Customs helping public see the daily Customs clearance times of import cargo at various ports and airports. With ICEDASH, Indian Customs has taken a lead globally to provide an effective tool that helps the businesses compare clearance times across ports and plan their logistics accordingly. This dashboard has been developed by CBIC in collaboration with NIC. **ICEDASH can be accessed through the CBIC website.**

ATITHI:

- With ATITHI mobile app, CBIC has introduced an easy to use mobile app for international travellers to file the Customs declaration in advance. Passengers can use this app to file declaration of dutiable items and currency with the Indian Customs even before boarding the flight to India. ATITHI would in particular create a tech savvy image of India Customs and would encourage tourism and business travel to India.

6. Shaala Darpan Portal

Why in News?

- Minister of State for Human Resource Development, launched Shaala Darpan portal, an E-Governance school automation and management system for Navodaya Vidyalaya Samiti (NVS) in New Delhi.

Shaala Darpan Portal:

- Shaala Darpan is an end to end e-Governance school automation and management system.
- It is a database management portal, where information about all government schools and education offices is kept online and updated as a continuous process.
- In this portal, "live data" is compiled in connection with primary and secondary education students, schools and academic and non-academic staff.
- It has been implemented at Navodaya Vidyalaya Samiti as the first major initiative to enable automation of all activities of the country's largest residential schooling system through a single umbrella.

7. SkillsBuild platform

Why in News?

- The Ministry of Skill Development & Entrepreneurship (MSDE) launched the SkillsBuild platform in collaboration with IBM.

SkillsBuild platform:

- As part of the programme, a two-year advanced diploma in IT, networking and cloud computing, co-created and designed by IBM will be offered at the ITIs & National Skill Training Institutes (NSTIs).
- The platform will be extended to train ITI & NSTI faculty on building skills in Artificial Intelligence (AI).
- The platform is deployed with the support of leading NGOs like Unnati and Edunet Foundation.
- IBM Volunteers along with the NGOS will offer students personalized coaching and experiential learning opportunities.
- The digital platform will provide a personal assessment of the cognitive capabilities and personality via MyInnerGenius to the students.
- They will then learn foundational knowledge about digital technologies, as well as professional skills such as resume-writing, problem solving and communication.
- Students will alsos receive recommendations on role-based education for specific jobs that include technical and professional learning.

"New Collar Curriculum" Initiative:

- IBM joined hands with Ministry of Skill Development & Entrepreneurship (MSDE) in early 2018 to launch a first-of-its kind 'New Collar Curriculum'.
- This initiative is part of IBM's global commitment to create a job-ready workforce and to build the next generation of skills needed for new collar careers.

8. No Money for Terror' Ministerial Conference

Why in News?

- The Union Minister of State for Home Affairs led the Indian delegation at the 'No Money for Terror' Ministerial Conference in Melbourne, Australia.

Highlights:

- The minister proposed four points for inclusion in the resolution at the conference:

- Terrorism is the single biggest threat to peace, security and development.

- Nations must expedite the finalisation of a Comprehensive Convention on International Terrorism under the United Nations.

- FATF Standards must be effectively enforced and UN listings/FATF should not be politicised. Initiate discussion on Countering Financing of Radicalisation (CFR), which would prevent radicalisation – an essential prerequisite of terrorism.

- The minister also declared that India would host the next 'No Money for Terror' Conference in 2020.

No Money for Terror Conference:

- The conference is organised by Financial Intelligence Units (FIUs) of over 100 countries jointly called The Egmont Group. Recognising the importance of international cooperation in the fight against money laundering and financing of terrorism, a group of FIUs met a few years ago at the Egmont Arenberg Palace in Brussels, Belgium, and decided to establish an informal network of FIUs for the stimulation of international co-operation.

- The Egmont Group was created to provide FIUs around the world a forum to exchange information confidentially to combat money laundering, financing of terrorism and other predicate offences.

9. DIN System of CBIC

Why in News?

- The Documentation Identification Number (DIN) system of the Central Board of Indirect Taxes (CBIC) will come into existence from 8th November 2019.

Documentation Identification Number (DIN) system:

- From now on, any CBIC communication will have to have a Documentation Identification Number.

- The government has already executed the DIN system in the direct tax administration.

- This step is to further the government's objectives of bringing transparency and accountability in the indirect tax administration also, through the widespread use of information technology.

- To begin with, in the indirect tax administration, the DIN would be used for search authorisation, summons, arrest memo, inspection notices and letters issued in the course of any enquiry.

- From now onwards, any communication from GST or Custom or Central Excise department without a computer-generated DIN, would be treated as invalid and shall be non-est in law or deemed to be as if it has never been issued.
- It would also provide the taxpayer a digital facility to verify any communications.
- Now all such specified communications with DIN would be verifiable on the online portal cbicddm.gov.in.

Central Board of Indirect Taxes (CBIC):

- The Central Board of Indirect Taxes (CBIC) is a part of the Department of Revenue under the Ministry of Finance, Government of India.
- The CBIC is the apex body for administering the levy and collection of indirect taxes of the Union of India.
- It deals with the tasks of formulation of policy concerning levy and collection of Customs, Central Excise duties, Central Goods & Services Tax and IGST, prevention of smuggling and administration of matters relating to Customs, Central Excise, Central Goods & Services Tax, IGST and Narcotics to the extent under CBIC's purview.
- It is the administrative authority for its subordinate organizations, including Custom Houses, Central Excise and Central GST Commissionerate's and the Central Revenues Control Laboratory.

Functions of the CBIC:

- **Regulatory Functions:**
  - ✓ Levy and collection of Customs and Central Excise duties, CGST & IGST
  - ✓ Registration and monitoring of units manufacturing excisable goods and service providers
  - ✓ Receipt and scrutiny of declarations and returns filed with the department
  - ✓ Prevention of smuggling and combating evasion of duties and service tax
  - ✓ Enforcement of border control on goods and conveyances
  - ✓ Assessment, examination and clearance of imported goods and export goods
  - ✓ Implementation of export promotion measures
  - ✓ Clearance of international passengers and their baggage
  - ✓ Resolution of disputes through administrative and legal measures
  - ✓ Sanction of refund, rebate and drawback
  - ✓ Realization of arrears of revenue
  - ✓ Audit of assessments for ensuring Tax Compliance

- **Service Functions:**
  - ✓ Dissemination of information on law and procedures through electronic and print media
  - ✓ Enabling filing of declarations, returns and claims through online services.
  - ✓ Providing information on the status of processing of declarations, returns and claims
  - ✓ Assisting the right holders in protecting their intellectual property rights
  - ✓ Responding to public enquiries relating to Customs, Central Goods and Service Tax matters
  - ✓ Providing Customs services such as examination of goods and factory stuffing of export goods at clients' sites, as per policy
  - ✓ The CBIC was formerly known as the Central Board of Excise & Customs. The name was changed in 2018 after the introduction of the GST (which subsumed indirect taxes).

10. "National Capital Region -2041"

Why in News?

- The inaugural conclave "NCR-2041" with the theme "Planning for Tomorrow's Greatest Capital Region" will be held in the national capital.
- The Regional Plan-2041 for NCR will be among the key instruments to address various issues related to harmonious development of the largest metropolitan region of the world.

National Capital Region Planning Board (NCRPB):

- The National Capital Region (NCR) is a distinct federal setup having the National Capital Territory of Delhi as its core. It is a unique example of inter-state regional planning and development.
- The constituent areas of the National Capital Region are as under:
  - ✓ Entire National Capital Territory of Delhi.
  - ✓ Districts from Haryana sub-region.
  - ✓ Districts from Rajasthan sub-region.
  - ✓ Districts from Uttar Pradesh Sub-region.
- For the development of above, the National Capital Region Planning Board (NCRPB) was constituted by the Act of Parliament in 1985, as a statutory body under the Ministry of Housing & Urban Affairs.
- The NCRPB is tasked to evolve harmonized policies for the control of land-uses and development of infrastructure in the region so as to avoid any haphazard development.

11. Indian Railways Launches Three Online Applications

Why in News?

- Indian Railways launched three applications for all-India rollout to strengthen the IT enablement of railways which will help ensure proper monitoring of projects being undertaken by Indian Railways and will boost the vision of Digital India.

Highlights:

- The details and the salient features of these three applications are as under:

CRS Sanction Management System:

- CRS Sanction is an important aspect in construction, maintenance and up-gradation of railway assets.

- **Benefits:**
  - ✓ Expeditious preparation and processing of cases for CRS Sanction.
  - ✓ Effective monitoring of compliance of observations raised by the CRS.
  - ✓ On-Line Repository of circulars/check-lists/guidelines related to CRS Sanction.
  - ✓ Managerial reports to monitor the cases, comparative performance.

Rail-road Crossing GAD Approval System:

- This project for online e-Governance platform was developed to expedite preparation, processing & approval of General Agreement Drawings (GADs) related to construction of Road Over Bridges (ROB)/Road Under Bridges (RUB).

- **Benefits:**
  - ✓ Accountability of Railways and State Governments/UTs is fixed to each stage for approval of proposals.
  - ✓ Better and real time coordination between the stakeholders (Railways/States).
  - ✓ Facilitates users to get proposal status through mail and SMS at each stage.
  - ✓ Complete proposal is targeted to be approved in a maximum of 60 days.
  - ✓ All information related to the proposal and contact person is available within the proposal.

TMS for construction:

- This application has been developed for new assets being constructed by the construction/project organisation.

- **Benefits:**
  - ✓ Data validation at source.

✓ Easy checking/verification of data entry.

✓ For every data ownership and responsibility is defined and fixed in the application design.

12. Jal Jeevan Mission

Why in News?

- The Union Minister for Water Resources reviewed the Jal Jeevan Mission in the southern states.

Jal Jeevan Mission:

- The Mission was announced in August 2019.

- The chief objective of the Mission is to provide piped water supply (Har Ghar Jal) to all rural and urban households by 2024.

- It also aims to create local infrastructure for rainwater harvesting, groundwater recharge and management of household waste water for reuse in agriculture.

- According to the data published in various reports, about half of the country's households don't have access to piped water supply.

- It is an urgent requirement of water conservation in the country because of the decreasing amount of groundwater level.

- Therefore, the Jal Jeevan Mission will focus on integrated demand and supply management of water at the local level.

Benefits:

✓ Household pipeline water supply

✓ Clean and drinkable water

✓ Recharge of groundwater level

✓ Better local infrastructure

✓ Less water-borne diseases

✓ Less water wastage

13. Social Audits of Major Rural Development Schemes

Why in News?

- The Department of Rural Development decides to institutionalize social audits in major schemes.

Highlights:

- The Department of Rural Development has decided to institutionalize social audits in major schemes of rural development, starting with the National Social Assistance Programme (NSAP) and the Pradhan Mantri Awas Yojana – Gramin (PMAY-G).

- In this backdrop, a two-day 'National Seminar on Social Audit of Rural Development Programmes' is being organised in November 2019.

- It is being jointly conducted by the Department of Rural Development and the National Institute of Rural Development and Panchayati Raj.

- The objective of the seminar is to understand the current status of social audits and Social Audit Units (SAUs) and develop a plan for roll out of social audit in other programmes.

- The Seminar will take stock of the current status of Social Audits and SAUs in terms of independency, funds, issues identified, actions taken, etc. and will provide a platform for SAUs to share their experiences of conducting social audit.

- Models and best practices in social audit from across states in India and also from other countries will be showcased. Participants will also develop an action plan for strengthening SAUs and roll out of social audit in other rural development programmes especially NSAP and PMAY-G.

Social Audit for Schemes:

- Social Audit is recognized by many, including the Comptroller and Auditor General (CAG), as a powerful tool to enforce transparency and accountability.

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was the first Act to mandate Social Audits by the Gram Sabha of all the projects taken up in the Gram Panchayat.

- In addition to MGNREGA, a few states have taken up social audit of other schemes as well.

- Pradhan Mantri Aawas Yojana-Gramin (PMAY-G) audits are done in Uttar Pradesh, Meghalaya and West Bengal. National Social Assistance Programme (NSAP) audits are done in Andhra Pradesh and West Bengal. Meghalaya Legislature has enacted 'The Meghalaya Community Participation and Public Services Social Audit Act, 2017' which mandates social audit in 26 different schemes in Education, Health, Rural Development and other areas. Eight States have taken up Social Audit of 11 different schemes including Pradhan Mantri Aawas Yojana-Gramin (PMAY-G), Swachh Bharat Mission (SBM), National Social Assistance Programme (NSAP), Integrated Child Development Service (ICDS) and Mid-Day Meals (MDM).

Pradhan Mantri Aawas Yojana-Gramin (PMAY-G):

- This scheme functions under the Ministry of Rural Development.
- The objective of the scheme is to help rural people below the poverty line (BPL) in constructing dwelling units and upgrading the existing unserviceable kutcha houses by providing assistance in the form of a full grant.
- Rural housing programme, as an independent programme, started with the Indira Awaas Yojana (IAY) in January 1996.
- To address certain gaps in the IAY, the government restructured it into the PMAY-G with a commitment to provide "Housing for All" by the year 2022.
- Beneficiaries are chosen according to data taken from the Socio-Economic Caste Census (SECC) of 2011.

National Social Assistance Programme (NSAP):

- NSAP was launched in 1995.
- This was introduced in accordance with the Directive Principles of State Policy (DPSP) which 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.
- The NSAP aims at ensuring a minimum national standard for social assistance in addition to the benefits that states are currently providing or might provide in the future.
- It is a social security and welfare programme to provide support to aged persons, widows, disabled persons and bereaved families on the death of the primary breadwinner, belonging to BPL households.
- Currently, the NSAP comprises of five schemes:
  - ✓ Indira Gandhi National Old Age Pension Scheme (IGNOAPS)
  - ✓ Indira Gandhi National Widow Pension Scheme (IGNWPS)
  - ✓ Indira Gandhi National Disability Pension Scheme (IGNDPS)
  - ✓ National Family Benefit Scheme (NFBS)
  - ✓ Annapurna Scheme

14. National Water Policy (NWP)

Why in News?

- The Union Water Resources Ministry has finalised a committee to draft a new National Water Policy (NWP).

National Water Policy:

- National Water Policy is formulated by the Ministry of Water Resources of the Government of India to govern the planning and development of water resources and their optimum utilization.
- The first National Water Policy was adopted in September 1987. It was reviewed and updated in 2002 and later in 2012.
- Among the major policy innovations in the 2012 policy was the concept of an Integrated Water Resources Management approach that took the "river basin/ sub-basin" as a unit for planning, development and management of water resources.
- A National Bureau of Water Use Efficiency is also on the cards.

Committee:

- It will be chaired by Mihir Shah, who is a former Planning Commission member and a water expert.
- The committee has 10 principal members, including Shashi Shekhar, a former secretary of Water Resources, and A.B. Pandya, former chairman of the Central Ground Water Board.
- The committee is expected to produce a report within six months.

Focus on Minimum Levels:

- It also proposed that a portion of river flows ought to be kept aside to meet ecological needs. Such an approach led to the government, in 2018, requiring minimum water levels to be maintained in the Ganga all through the year and hydropower projects, therefore, to refrain from hoarding water beyond a point.
- That policy also stressed for a minimum quantity of potable water for essential health and hygiene to all its citizens to be made available within easy reach of households.
- Inter-basin transfers are not merely for increasing production but also for meeting basic human need and achieving equity and social justice.
- Inter-basin transfers of water should be considered on the basis of merits of each case after evaluating the environmental, economic and social impacts of such transfers.

15. CJI's office comes under ambit of RTI Act, SC says

Why in News?

- The office of the Chief Justice of India is a public authority and falls under the ambit of Right to Information Act, the Supreme Court ruled today.

Highlights:

- The five-judge bench of CJI Ranjan Gogoi, Justices N V Ramana, D Y Chandrachud, Deepak Gupta and Sanjiv Khanna passed the judgment on an appeal filed by the Supreme Court administration. The appeal challenged the 2010 order of the Delhi high court which held that the CJI's office comes under the ambit of the Right to Information Act.
- Oppositions to the plea had contended that courts had time and again given a slew of directions to infuse transparency in the functioning of various institutions.
- The bench had agreed that there should be transparency, but added there was a need to do balancing.

Who is a "Public Authority"?

- In 2011, the Punjab-Haryana High Court while deciding on 24 civil writ petitions against the Central/State Information Commissioners had held that if any person, or body, satisfies the following conditions then it would "squarely fall within the ambit and scope of definition of 'public authorities'" and would be "legally required to impart the indicated information as envisaged under the RTI Act" –
  - ✓ The Institution cannot come into existence and function unless registered and regulated by the provisions of a legislation; or
  - ✓ The State Government has some degree of control over it through the medium of Acts/Rules; or
  - ✓ It is substantially financed by means of funds provided directly, or indirectly, by the appropriate Government; or
  - ✓ The mandate and command of the provisions of the RTI Act along with its Preamble, aims, objects and regime extend to their public dealing; or
  - ✓ The larger public interest and totality of the other facts and circumstances emanating from the records suggest that such information may be disclosed.

The Delhi High Court order:

- In a landmark verdict on January 10, 2010, the Delhi High Court had held that the office of the Chief Justice of India comes within the ambit of the RTI law.
- It said that the judicial independence was not a judge's privilege, but a responsibility cast upon him.
- The 88-page judgment was then seen as a personal setback to the then CJI, KG Balakrishnan, who has been opposed to disclosure of information relating to judges under the RTI Act.

- The apex court said that the right to privacy and confidentiality is an important aspect and has to be balanced while taking a decision on giving out information from the CJI's office.
- The CJI-led bench added that transparency cannot be allowed to run counter to right to privacy.
- The bench said that the information commissioner must apply test of proportionality while entertaining applications seeking information from the CJI's office.
- However, it must keep in mind right to privacy and independence of judiciary.

16. National Agrochemicals Congress

Why in News?

- The Union Agriculture Minister inaugurated the first-ever National Agrochemicals Congress in New Delhi.

National Agrochemicals Congress:

- The Congress is conducted in view of the relevance chemical pesticides still continue to play in pest management as more and more target specific and environment-friendly products are being introduced.
- It is being held in New Delhi in **November 2019.**
- The benefits of pesticide use are high relative to their risks.
- New concepts in crops, human health, resource management, nanotechnology, smart formulations and related sciences are likely to boost agricultural productivity.
- With this background, current status of agrochemicals on various fronts will be collated for researchers and policymakers in order to ensure agriculture grow in a sustainable manner.

17. Atal Tinkering Lab Marathon

Why in News?

- Selected student innovators of Atal Tinkering Lab Marathon 2018 call on the President.

Atal Tinkering Lab Marathon:

- Atal Tinkering Lab Marathon is organised by the Atal Tinkering Labs of Atal Innovation Mission (AIM) and the NITI Aayog in an effort to identify India's best student innovators.
- It is a six-month-long nationwide challenge across six different thematic areas, namely, clean energy, water resources, waste management, healthcare, smart mobility and agriculture-tech. This is open to all students under the **age of 18 years.**

- Students of top 30 innovations will be trained on business and entrepreneurship skills, including intellectual property, effective communication, making an elevator pitch, etc.
- These top 30 innovations have been identified from 20 different States/UTs from across India.
- The winners are being awarded with several prizes including a three month-long ATL Student Innovator Program (ATL SIP) in partnership with the industry and start-up incubators.
- The goal of the student innovator program is to test the innovations in the community.
- The ATL Student Innovator Program is an effort to institutionalize a mechanism, where high school students can work with university incubators to pursue their innovative and entrepreneurial ideas along with their education.

Atal Tinkering Labs:

- Atal Tinkering Labs (ATLs) under the Atal Innovation Mission of NITI Aayog, is based on the philosophy that incentives and prize awards are a great beginning to create an exponential wave of innovation and entrepreneurship amongst school children.
- ATLs are established in schools across the country.
- The objective of this scheme is to foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing, etc.
- ATL is a workspace where young minds can give shape to their ideas through hands-on do-it-yourself mode, and learn innovation skills.
- Young children will get a chance to work with tools and equipment to understand the concepts of STEM (Science, Technology, Engineering and Math).
- ATL would contain educational and learning 'do it yourself' kits and equipment on – science, electronics, robotics, open source microcontroller boards, sensors and 3D printers and computers.

Atal Innovation Mission (AIM):

- The AIM was launched in 2016.
- It is a flagship initiative set up by the NITI Aayog to promote innovation and entrepreneurship across the length and breadth of the country.
- AIM's objectives are to create and promote an ecosystem of innovation and entrepreneurship across the country at school, university, research institutions, MSME and industry levels.

18. SC Dismisses Pleas to review Rafale Ruling

Why in News?

- The Supreme Court has dismissed a review petition seeking a court-monitored criminal probe in Rafale fighter jet deal between the Indian government and France's Dassault Aviation.

Highlights:

- The three-judge bench was presided over by Chief Justice Ranjan Gogoi and comprised Justices S.K. Kaul and K.M. Joseph.
- The bench stated there was no merit in the review petition and that no probe was required in the purchase deal.
- In a unanimous verdict, the bench concluded that it was not appropriate to order a roving inquiry into the allegations.
- The petition was dismissed on the grounds that it is not within the purview of judicial review.

Background:

- The Rafale deal pertains to a government-to-government agreement signed between India and France to purchase 36 Rafale fighter jets from the French aerospace giant Dassault. The deal was signed by PM Narendra Modi during his first term in office.
- The petitioners had alleged irregularities in the purchase of 36 Rafale fighter jets from France's Dassault Aviation.
- The deal became controversial over allegations that the government had bypassed established norms of acquisition to sign the deal and that industrialist Anil Ambani received undue favours under the deal.
- In December 2018, the Supreme Court said it had not seen any evidence that could raise doubts over the government's decision-making process and so, it ruled to dismiss the pleas seeking a court-monitored probe into the deal.

19. Regional Conference on Replication of Good Governance Practices concludes

Why in News?

- The two-day Regional Conference on 'Replication of Good Governance Practices in UTs of Jammu & Kashmir and Ladakh organised in Jammu concluded.
- 'Sushasan Sankalp: Jammu Ghoshana' resolution was adopted in the Conference.

Sushasan Sankalp:

- The Conference resolved that Government of India and the participating State Governments and the Union Territories of Jammu & Kashmir and Ladakh shall collaborate to:

- Develop the Union Territories of Jammu & Kashmir and Ladakh as models of administrative excellence using digital technologies in implementation of welfare Union Territory programs;

- To make sustained efforts to create a transparent, accountable and people-centric administration in the Union Territories of Jammu & Kashmir and Ladakh;

- Improve the Citizen's interface with Government by promotion of digital governance, citizen centric governance, innovation and capacity building in the Union Territories of Jammu & Kashmir and Ladakh;

- Refine and consolidate the successful local Governance initiatives and upscale them across Jammu & Kashmir and Ladakh to bring out the best outcomes of Governance and Public Policy to the Union Territories of Jammu & Kashmir and Ladakh;

- To improve the grievance redressal mechanisms by forging greater synergy between Awaaz e-Awam and the CPGRAMS; Promote the use of e-Office and move towards less paper Secretariats in the Union Territories of Jammu & Kashmir and Ladakh;

- Promote capacity building and personnel administration by formulating mid-career training programs and specific need-based training programs for officials in the Union Territories of Jammu & Kashmir and Ladakh;

- Replicate the innovations and the best practices in successful national governance initiatives including digital governance, citizen centric grievance redressal and aspirational districts so as to provide a clean, transparent and people centric governance to the UTs of J&K and Ladakh.

20. India Hypertension Control Initiative (IHCI)

Why in News?

- The India Hypertension Control Initiative (IHCI) launched in four districts of the State has been able to control hypertension in about 35% of the people covered under the initiative.

Hypertension:

- Hypertension (HTN or HT), also known as high blood pressure (HBP), is a long-term medical condition in which the blood pressure in the arteries is persistently elevated.

- Usually hypertension is defined as blood pressure above 140/90, and is considered severe if the pressure is above 180/120.
- High BP often has no symptoms. Over time, if untreated, it can cause health conditions, such as heart disease and stroke.
- Eating a healthier diet with less salt, exercising regularly and taking medication can help lower blood pressure.

IHCI:

- The IHCI was launched in Kerala in April 2018 as a multi-partner five-year initiative with the Union Ministry of Health and Family Welfare, Indian Council of Medical Research, State government, and WHO India.
- The IHCI was also launched in Madhya Pradesh, Telangana, Maharashtra, and Punjab.
- The results from Kerala had been the most impressive so far because of the infrastructure strength of non-communicable disease clinics across the State.
- Each patient was given a treatment book and the health card was kept at the hospital.
- Every month there was a follow-up on the patient by the hospital over the phone or by visit of an Accredited Social Work Activist.
- With the success of the initiative, the government is considering replicating it in other districts too.

Significance:

- A total of 2.23 lakh people — 72,460 in Thiruvananthapuram, 74,909 in Thrissur, 58,818 in Kannur, and 19,009 in Wayanad — were registered for the IHCI.
- Of 4,530 patients among them, 40% in Thiruvananthapuram, 32% in Thrissur, 37% in Kannur and 24% in Wayanad could better control their health parameters.
- This study group's parameters for blood pressure (BP) control were followed up from July to September 2019.

Recent Studies:

- This is a marked change from the average of 13% of people having control of hypertensive parameters recorded in non-communicable disease (NCD) clinics in the State (data inferred from NCD clinics).
- In the IHCI study group, those with uncontrolled blood pressure in these districts were put at 43%, 37%, 38% and 27%.
- In the group, 15%, 31%, 25%, and 49% had also defaulted because of various reasons — change of address, change in treatment system or others.

21. SARAS IITF 2019

Why in News?

- The Union Minister for Rural Development inaugurates the SARAS IITF 2019.

SARAS IITF 2019:

- SARAS Mela is an initiative by the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM), Ministry of Rural Development (MoRD), Government of India with an objective to bring the rural women SHG members formed under DAY-NRLM, in one platform to showcase their skills, sell and build linkages with potential market players.

- SARAS Mela not only provides a platform to these SHG women, but it also provides a national level exposure to understand the demand and taste of the urban customers in metros. The SARAS IITF Mela is organized by the Council for Advancement of People's Action and Rural Technology (CAPART) along with DAY-NRLM, MoRD.

- Items for display and sale include natural food items, handicraft, handloom, etc.

- Artisans from various states participate in the event.

22. Jansankhya Sthirata Kosh

Why in News?

- Jansankhya Sthirata Kosh (JSK) an autonomous body under Ministry of Health and Family Welfare, implemented the following schemes:
  - ✓ Prerna Scheme (for delaying marriage, childbirth and spacing),
  - ✓ Santushti Scheme (Public Private Partnership for sterilization services)
  - ✓ National Helpline (for information on family planning).

JSK:

- Jansankhya Sthirata Kosh (JSK) is a registered society of the Ministry of Health and Family Welfare started with a Rs 100 crore grant from government.

- The society was established with the objective of highlighting the need for population stabilization. Its accounts can be audited by the CAG.

- The "Jansankhya Sthirata Kosh" (JSK) (National Population Stabilisation Fund) has been registered as an autonomous Society established under the Societies Registration Act of 1860. JSK has to promote and undertake activities aimed at achieving population stabilisation at a level consistent with the needs of sustainable economic growth, social development and environment protection, by 2045.

23. Sowa-Rigpa

Why in News?

- Cabinet approves establishment of the National Institute of Sowa-Rigpa (NISR) at Leh.

Highlights:

- The setting up of the National Institute of Sowa-Rigpa would provide an impetus for the revival of Sowa-Rigpa in the Indian subcontinent.

- The Institute will also provide opportunities for students of Sowa-Rigpa not only in India but also from other countries.

- The Institute will be an autonomous National Institute under the Ministry of AYUSH with the mandate to undertake interdisciplinary education and research programmes in Sowa-Rigpa in collaboration with premier national and international institutes and facilitate the integration of different systems of medicine.

- This will facilitate quality education, scientific validation, quality control & standardization and safety evaluation of Sowa-Rigpa products; standardized Sowa-Rigpa based tertiary health delivery and the promotion of interdisciplinary research & education of Sowa-Rigpa at undergraduate, postgraduate and postdoctoral levels.

- NISR would identify the best Sowa-Rigpa treatment – including their standard procedures-within the framework of traditional Sowa-Rigpa principles and possible co-relation with bio-molecular western medicine in providing health care facilities to the general public.

Sowa-Rigpa:

- Sowa-Rigpa is a traditional medical system of the Himalayan belt in India.
- It has been popularly practiced in Sikkim, Arunachal Pradesh, Darjeeling (West Bengal), Himachal Pradesh and the Union Territory of Ladakh.
- Commonly known as the Tibetan system of medicine, it is one of the oldest, living and well documented medical traditions of the world.
- It originated in Tibet and has spread to India, Nepal, Bhutan, Mongolia and Russia.
- The majority of the theory and practice of Sowa-Rigpa is similar to Ayurveda.
- rGyud-bZhi (four tantras) the fundamental textbook of this medicine was composed by Yuthog Yonten Gonpo, who is believed to be the father of Sowa-Rigpa.
- rGyud-bZhi, which is based on the indigenous medicine of Tibet, is enriched with Ayurveda, Chinese and Greek medicine.

24. Industrial Relations Code Bill, 2019

Why in News?

- Cabinet approves the Industrial Relations Code Bill, 2019.

Highlights:

- The draft code on Industrial Relations has been prepared after amalgamating, simplifying and rationalizing the relevant provisions of the following three Central Labour Acts:
- The Trade Unions Act, 1926
- The Industrial Employment (Standing Orders) Act, 1946
- The Industrial Disputes Act, 1947
- To help industries in hiring contract workers directly, the government has proposed to introduce the concept of fixed-term employment in the labour laws.
- Fixed-term employment is a contract in which a company or an enterprise hires an employee for a specific period of time.
- In fixed-term employment, the employee is not on the payroll of the company.
- The Bill has proposed giving a legal framework for fixed-term employment through which contract workers serving a fixed-tenure will get equal statutory social security benefits as regular workers in the same unit.
- Under the present system, firms resort to hiring contract workers through contractors and they argue that it's a resourceful exercise.
- Through the fixed-term employment system, companies will be able to hire contract workers directly.
- In 2015, the government had proposed allowing factories with up to 300 workers to retrench, lay off or shut shop without seeking the government's nod in the Industrial Relations Bill proposed in 2015.
- At present, factories with up to 100 workers can do so.
- Amid severe opposition from trade unions on this proposal, the government decided to shelve it and retain the present threshold.
- A few states have allowed factories with 300 workers to retrench without official sanction. Now, these state labour reforms would be nullified as the central laws take precedence. Labour falls under the concurrent list of the Constitution.

25. Commercial Exploitation of Space Research and Development

Why in News?

- A new company by name, "New Space India Limited (NSIL)", has been incorporated in March 2019, as a wholly-owned Government of India Undertaking/Central Public Sector Enterprise (CPSE), under the administrative control of the Department of Space (DOS) to commercially exploit the research and development work of Indian Space Research Organisation (ISRO).

NSIL Mandate:

- Small Satellite technology transfer to industry wherein NSIL will obtain license from DOS/ISRO and sub-license it to industries.
- Manufacture of Small Satellite Launch Vehicle (SSLV) in collaboration with the private sector.
- Productionisation of Polar Satellite Launch Vehicle (PSLV) through the Indian Industry.
- Productionisation and marketing of space-based services, including launch and application. Transfer of technology developed by ISRO Centres and constituent institutions of DOS. Marketing of spin-off technologies and products, both in India and abroad. Any other subject which the Government of India deems fit.

Highlights:

- With the activity plan and the mandate set for NSIL, Indian industries are likely to see a major spur in their growth in the space sector.
- This initiative would further enable scaling up the manufacturing and production base in Indian industries towards meeting the growing needs of the Indian space programme and exploiting the opportunities available in the global space market.
- Through the sale of products related to small satellite, sub-system technology and the spin-off products in the domestic and global markets, foreign exchange revenue is expected to be generated.

26. Intensified Mission Indradhanush (IMI) 2.0

Why in News?

- The Intensified Mission Indradhanush (IMI) was launched in 2017 aimed at reducing maternal and child mortality by reaching out to each and every child under two years of age and all the pregnant women who are left uncovered under the routine immunization programme.

Intensified Mission Indradhanush (IMI) 2.0:

- The IMI 2.0 aims to achieve targets of full immunization coverage in 272 districts in 27 States.

- IMI 2.0 will be rolled out in December 2019.

- The Salient Features of IMI 2.0 are:

  ✓ Immunization activity will be in four rounds over 7 working days excluding the RI days, Sundays and holidays.

  ✓ Enhanced immunization session with flexible timing, mobile session and mobilization by other departments.

  ✓ Enhanced focus on left-outs, dropouts, and resistant families and hard to reach areas.

  ✓ Focus on urban, underserved population and tribal areas.

  ✓ Inter-ministerial and inter-departmental coordination.

  ✓ Enhance political, administrative and financial commitment, through advocacy.

  ✓ Intensified Mission Indradhanush immunization drive, consisting of 4 rounds of immunization will be conducted in the selected districts and urban cities in Dec 2019 – March 2020.

27. Child Health Programme under NHM

Why in News?

- Government of India is implementing Reproductive, Maternal, Newborn, Child, Adolescent health and Nutrition (RMNCHAN) strategy to improve maternal and Child health outcome under National Health Mission (NHM).

The Various Interventions under RMNCHA+N Strategy are as below:

- Promotion of Institutional deliveries through cash incentive under Janani Suraksha Yojana (JSY) and Janani Shishu Suraksha Karyakaram (JSSK) which entitles all pregnant women delivering in public health institutions to absolutely free delivery including Caesarean section, post-natal care and treatment of sick infants till one year of age.

- Pradhan Matritvya Vandana Yojana (PMMVY) is another maternity benefit programme under which cash incentive of Rs. 5000 is provided to pregnant women and lactating mothers.

- Early initiation and exclusive breastfeeding for first six months and appropriate Infant and Young Child Feeding (IYCF) practices are promoted under Mothers' Absolute Affection (MAA) in convergence with Ministry of Women and Child Development.

- Village Health Sanitation and Nutrition Days (VHSNDs) are observed for provision of maternal and child health services and creating awareness on maternal and child care.

- Nutrition Rehabilitation Centres (NRCs) have been set up at public health facilities to treat and manage the children with Severe Acute Malnutrition (SAM) admitted with medical complications.

- Universal Immunization Programme (UIP) is being supported to provide vaccination to children against life threatening diseases such as Tuberculosis, Diphtheria, Pertussis, Polio, Tetanus, Hepatitis B, Measles, Rubella, Pneumonia and Meningitis caused by Haemophilus Influenzae B. The Rotavirus vaccination has also been rolled out in the country for prevention of Rotaviral diarrhoea. "Mission Indradhanush is targeted to immunize children who are either unvaccinated or partially vaccinated i.e. those that have not been covered during the rounds of routine immunization for various reasons. Intensified Mission Indradhanush (IMI) 2.0 is being planned as per road-map for achieving 90% full immunization coverage across the country.

- All the children from 0 to 18 years of age are screened for 30 health conditions classified into 4Ds – Diseases, Deficiencies, Defects and Developmental delay under "Rastriya Bal Swasthya Karyakaram" (RBSK).

- National Deworming Day (NDD) is implemented biannually every year for deworming of children (one to nineteen year of age).

- Name based tracking of mothers and children till two years of age is done through RCH portal to ensure complete antenatal, intranatal, postnatal care and immunization as per schedule.

- Capacity building of health care providers is regularly done to build and upgrade the skills in basic and comprehensive obstetric care of mother during pregnancy, delivery and for essential new-born care.

- Besides above programme and scheme, few newer initiatives started under RMNCHA+N are as follows:
  - Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) has been launched to provide fixed-day assured, comprehensive and quality antenatal care universally to all pregnant women on the 9th of every month.
  - "LaQshya" programme aims to improve the quality of care in Labour room and Maternity operation theatres.
  - Surakshit Matritva Aashwasan (SUMAN) initiative is focussed on assured delivery of maternal and newborn health care services encompassing wider access to quality care

services, at no cost, zero tolerance for denial of services, assured management of complications along with respect for women's autonomy and dignity.

- ✓ Defeat Diarrhoea (D2) initiative has been launched for promoting ORS and Zinc use and eliminating the diarrhoeal deaths by 2025.

- ✓ Social Awareness and Actions to Neutralize Pneumonia Successfully (SAANS) initiative is launched for reduction of Childhood morbidity and mortality due to Pneumonia.

- ✓ Anaemia Mukt Bharat (AMB) strategy is a part of Poshan Abhiyan that aims to strengthen the existing mechanisms and foster newer strategies to tackle anaemia, which include testing & treatment of anaemia in school going adolescents & pregnant women, addressing non-nutritional causes of anaemia and a comprehensive communication strategy.

28. Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)

Why in News?

- Launched in September 2018, the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme remains one of India's most ambitious health schemes ever.

Highlights:

- It was launched as recommended by the National Health Policy 2017, to achieve the vision of Universal Health Coverage. It is a Centrally Sponsored Scheme having central sector component under Ayushman Bharat Mission anchored in the Ministry of Health and Family Welfare (MoHFW). It is an umbrella of two major health initiatives, namely Health and wellness Centres and National Health Protection Scheme. 5 lakh existing sub-centers will bring health care system closer to the homes of people in the form of Health and wellness centres. These centres will provide comprehensive health care, including for non-communicable diseases and maternal and child health services.

- The government aims to provide a health insurance cover of Rs 5 lakh to 500 million Indians free of cost. This includes families from lower-income groups that fall under the socio-economic caste census (SECC) data of 2011.

- States can implement PMJAY either through the insurance route or the trust route or both.

- The states implementing the scheme through the insurance mode select the insurance companies through an open tender process.

- The states implementing the scheme through the trust mode may engage Third-Party Administrators (TPAs) and Implement Support Agencies (ISAs) through an open tender process for implementing the scheme.

29. Global Bio-India Summit, 2019

Why in News?

- India's first largest biotechnology stakeholders' conglomerate, – the Global Bio-India (GBI) Summit, 2019 concluded.

Significance:

- Biotech is identified as one of the key sectors in Make in India 2.0.
- The event is planned to bring in stakeholders of 30 countries together.
- It will include 200 exhibitors and 250 startups. The Central and state regulatory bodies also participated in the summit.
- Biotechnology is recognized as the sunrise sector- a key driver for contributing to India's USD 5 Trillion economy target by 2025.

Summit Highlights:

- To identify funding and collaboration opportunities for research and Development
- To attract major projects from international companies
- To discuss policy interventions and key trends across the sub sectors like bio-agriculture, bio-energy, bio-industrial, bio-manufacturing, bio-services, etc. To facilitate interactions of research institutions with industry. The Summit provided an opportunity to showcase the potential of India's biotech sector to the international community, identify, create opportunities and deliberate on the key challenges in the areas of Bio-pharma, Bio-Agri, Bio-Industrial, Bio-Energy and Bio-Services and allied sectors.

30. NSS report on Persons with Disabilities in India

Why in News?

- The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation has conducted a Survey of Persons with Disabilities during July 2018 to December 2018.

Objective of Survey:

- The main objective of the Survey of Persons with Disabilities conducted by NSO was to estimate indicators of:
  - ✓ Incidence and prevalence of disability,
  - ✓ Cause of disability,
  - ✓ Age at onset of disability,

- ✓ Facilities available to the persons with disability,
- ✓ difficulties faced by persons with disability in accessing/using public building/public transport,
- ✓ Arrangement of regular care giver,
- ✓ Out of pocket expenses relating to disability, etc.

Highlights:

- In India prevalence of disability (percentage of persons with disability in the population) was 2.2% with 2.3% in rural and 2.0% in urban areas.
- Prevalence of disability was higher among males than females. Among males, prevalence of disability was 2.4% while it was 1.9% among females. Incidence of disability in the population, that is the number of persons with onset of disability (by birth or otherwise) during 365 days preceding the date of survey was 86 per 1,00,000 persons.

31. Hong Kong International Convention for Safe Recycling of Ships 2009

Why in News?

- The Union Cabinet has approved the proposal for enactment of Recycling of Ships Bill, 2019 and accession to the Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships, 2009.

Highlights:

- India is the leader in the global ship recycling industry, with a share of over 30% of the market.
- As per UNCTAD report on Review of Maritime Transport, 2018, India had demolished 6323 tonnes in 2017, of known ship scrapping across the world.
- The ship-recycling industry is a labour-intensive sector, but it is susceptible to concerns on environmental safety.

Recycling of Ships Bill, 2019:

- The proposed Bill restricts and prohibits the use or installation of hazardous material, which applies irrespective of whether a ship is meant for recycling or not.
- For new ships, such restriction or prohibition on use of hazardous material will be immediate.
- That is, from the date the legislation comes into force, while existing ships shall have a period of five years for compliance. Restriction or prohibition on use of hazardous material would not be applied to warships and non-commercial ships operated by Government.

- Ships shall be surveyed and certified on the inventory of hazardous material used in ships.

- Under the Bill, ship recycling facilities are required to be authorized and ships shall be recycled only in such authorized ship recycling facilities.

- The Bill also provides that ships shall be recycled in accordance with a ship-specific recycling plan. Ships to be recycled in India shall be required to obtain a Ready for Recycling Certificate in accordance with the HKC

Salient features:

- The GoI has decided to enact a Bill, namely Recycling of Ships Bill, 2019, to provide for the regulation of recycling of ships by setting certain international standards and laying down the statutory mechanism for enforcement of such standards.

- It has also been decided to accede to the Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships, 2009.

- When the Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships, 2009 comes into force, its provisions will be implemented under the provisions of the Recycling of Ships Bill, 2019 and rules and regulations framed there under.

Hong Kong Convention:

- The Hong Kong International Convention for the safe and environmentally sound recycling of ships, or Hong Kong Convention is a multilateral convention adopted in 2009, which has not entered into force.

- The convention has been designed to try to improve the health and safety of current ship breaking practices.

- The Hong Kong Convention recognised that ship recycling is the most environmentally sound way to dispose of a ship at the end of its life, as most of the ship's materials can be reused.

32. Global Housing Technology Challenge-India (GHTC-India)

Why in News?

- MoAs for Light House Projects under GHTC – India Exchanged between the Ministry of Housing and Urban Affairs and State Governments.

Highlights:

- Memorandums of Agreement (MoAs) were signed between the Ministry and six state governments for Light House Projects under GHTC-India.

- Six states: Gujarat, Jharkhand, Madhya Pradesh, Tamil Nadu, Tripura and Uttar Pradesh
- For addressing the housing demand of more than 10 million houses by 2022, the Government of India launched the Pradhan Mantri Awas Yojana-Urban, in June 2015.
- To accomplish 'Housing for All' mission, the Global Housing Technology Challenge-India (GHTC-India) was launched to get globally acclaimed, alternate and proven construction technologies for speedier and cost-effective construction of affordable housing.
- The Prime Minister declared 2019-2020 as 'Construction Technology Year'.

GHTC – India:

- This is a challenge instituted for all states and UTs to select six sites across the country for constructing lighthouse projects.
- The challenge has been launched to bring about a paradigm shift in the housing construction technology sector. The states and union territories that score the highest marks were awarded lighthouse projects.
- The term lighthouse project refers to a model project that aims, besides its original purpose, to have a signal effect for numerous follow-up projects as they look towards it for inspiration and guidance. (Light House – Something that gives guidance or shows the way)
- It is under this challenge that the 6 states were awarded the projects.
- The winning states will receive central assistance to construct these projects as per the Pradhan Mantri Awas Yojana (Urban) guidelines.
- The challenge is intended to foster the development of domestic technological research, and building platforms for knowledge sharing and networking across the sector.
- The challenge was launched in January 2019.

33. Pradhan Mantri Awas Yojana – Urban (PMAY-U):

- The PMAY-U was launched in 2015 to provide housing for all by 2022.
- The scheme provides central assistance to Urban Local Bodies (ULBs) and other implementing agencies through States/UTs.
- The programme has 4 verticals:
- Credit Link Subsidy Scheme (CLSS)
- In-situ rehabilitation of existing slum dwellers using land as a resource through private participation
- Affordable Housing in Partnership (AHP)
- Subsidy for beneficiary led individual house construction/enhancement

34. Sabka Vishwas (Legacy Dispute Resolution) Scheme, 2019

- The Aim of Sabka Vishwas (Legacy Dispute Resolution) Scheme, 2019 is to help taxpayers, including small taxpayers, in clearing the baggage of disputes under legacy taxes (Service Tax and Central Excise), which are subsumed in Goods and Service Tax.

- The scheme is for taxpayers who wish to close their pending disputes, with a substantial relief provided by the government.

- This scheme is effective from 1st September 2019 to 31st December 2019.

- The two main components of the Scheme are dispute resolution and amnesty.

- The dispute resolution component is aimed at liquidating the legacy cases of Central Excise and Service Tax that are subsumed in GST and are pending in litigation at various forums.

- The amnesty component of the Scheme offers an opportunity to the taxpayers to pay the outstanding tax and be free of any other consequence under the law.

- For all the cases pending in adjudication or appeal – in any forum – this Scheme offers a relief of 70% from the duty demand if it is Rs.50 lakhs or less and 50% if it is more than Rs.50 lakhs.

- As the objective of the Scheme is to free as large a segment of the taxpayers from the legacy taxes as possible, the relief given thereunder is substantial.

- The Scheme is especially tailored to free the large number of small taxpayers of their pending disputes with the tax administration.

Benefits of this scheme:

- Taxpayers can pay the outstanding tax amounts due and be free from any other consequences under the law.

- Taxpayers will get substantial relief in the form of full waivers of interest, penalties and fines. There will be complete amnesty from prosecution proceedings.

35. Golden Rice

Why in News?

- Bangladesh is set to becoming the first country to approve plantation of Golden Rice variety to counter Vitamin A deficiency.

Golden Rice:

- In the late 1990s, German scientists developed a genetically modified variety of rice called Golden Rice.

- It is a variety of rice (Oryza sativa) produced through genetic engineering to biosynthesize beta-carotene, a precursor of vitamin A, in the edible parts of rice.
- It differs from its parental strain by the addition of three beta-carotene biosynthesis genes.
- The parental strain can naturally produce beta-carotene in its leaves, where it is involved in photosynthesis.

Why Golden Rice?

- Golden Rice is intended to produce a fortified food to be grown and consumed in areas with a shortage of dietary vitamin A.
- It was claimed to be able to fight Vitamin A deficiency, which is the leading cause of blindness among children and can also lead to death due to infectious diseases such as measles.
- Rice is naturally low in the pigment beta-carotene, which the body uses to make Vitamin A. Golden rice contains this, which is the reason for its golden colour.
- The claim has sometimes been contested over the years, with a 2016 study from Washington University in St Louis reporting that the variety may fall short of what it is supposed to achieve.

Why in Bangladesh?

- Advocates of the variety stress how it can help countries where Vitamin A deficiencies leave millions at high risk. In Bangladesh, over 21 per cent of the children have vitamin A deficiency. The Golden Rice that is being reviewed in Bangladesh is developed by the Philippines-based International Rice Research Institute.
- According to the institute, this rice variety will not be more expensive than the conventional variety.

36. Bill on protecting mediapersons

Why in News?

- President has given assent to a legislation passed by the Maharashtra Assembly in 2017 that makes violent attacks on mediapersons a non-bailable offence.
- Maharashtra is the first State to pass such legislation.

Maharashtra Media Persons and Media Institutions Act, 2017:

- The Maharashtra Media Persons and Media Institutions (Prevention of Violence and Damage or Loss to Property) Act, 2017, also has a provision of imprisonment and a fine of ₹50,000.

- It was passed by the Assembly in 2017, but received the President's assent in October after the Union Home Ministry scrutinized the legislation and consulted all concerned Ministries. The MHA had returned the Bill to the Maharashtra government last year to seek clarification.
- The Bill has a provision that any offence against a mediapersons will be investigated by a police officer above the rank of a Deputy Superintendent of Police.

Why need such law?

- There are rampant instances of violence and attacks against mediapersons and damage or loss to the property of media institutions.
- There is strong demand to prevent such violence against mediapersons or damage or loss to the property belonging to mediapersons or media institutions and check the recurrence of such incidents in the State. In 2017, the MHA also issued an advisory to all States to ensure the "safety and security of journalists". The advisory was issued days after Bengaluru-based journalist Gauri Lankesh was shot dead near her home.

37. NSO survey debunks Swachh Bharat ODF claims

Why in News?

- NSO survey on sanitation coverage in India.

Highlights:

- The latest National Statistical Office (NSO) survey on sanitation debunked the claims of an open defecation-free or ODF India made by the Centre's flagship Swachh Bharat scheme, although it did record great progress in toilet access and use in rural areas.
- The survey was carried out between July and December 2018.
- On October 2, 2019, Prime Minister Narendra Modi declared that the whole country was ODF with complete access to toilets.
- In the first week of October 2018, the Swachh Bharat Abhiyan (Grameen) said 25 States and Union Territories had been declared ODF, while toilet access across the country touched 95%. Large States which had been declared ODF — that is, 100% access to toilets and 100% usage — even before the survey began included Andhra Pradesh, Gujarat, Maharashtra and Rajasthan. Others that were declared ODF during the survey included Jharkhand, Karnataka, Madhya Pradesh and Tamil Nadu.
- The survey showed that about 71% of rural households had access to toilets at a time when the Centre was claiming 95% had access.

Concerns:

- According to the NSO, almost 42% of the rural households in Jharkhand had no access to a toilet at the time of the survey. In Tamil Nadu, the gap was 37%, followed by 34% in Rajasthan.
- In Gujarat, which was one of the earliest States declared ODF, back in October 2017, almost a quarter of all rural households had no toilet access, the NSO data showed.
- The other major States listed also had significant gaps: Karnataka (30%), Madhya Pradesh (29%), Andhra Pradesh (22%) and Maharashtra (22%).
- The NSO said 28.7% of rural households had no toilet access at the time of the survey.
- The NSO noted that there may be respondent bias in the reporting of access to latrine as the question on benefits received by the households from government schemes was asked prior to the question on the access of households to a latrine.

Positives:

- The 71% access to toilets was still a significant improvement over the situation during the last survey period in 2012, when only 40% of the rural households had access to toilets.
- The NSO's statistics on toilet usage were also encouraging. It said 95% of people with access to toilets in rural India used them regularly, indicating that the Swachh Bharat Abhiyan's efforts to change behaviour had borne fruit.
- Only 3.5% of those with toilet access in rural India said they never used them.

38. DEFCOM India 2019

Why in News?

- The two-day DEFCOM INDIA 2019 seminar commenced at New Delhi.

DEFCOM 2019:

- DEFCOM is India's international conference & exposition on military communication.
- It is the flagship event in the area of military communication.
- The event brings together major national and international IT and communication industry and the key stakeholders from the Indian Armed Forces.
- It is jointly being organized by Corps of Signals, Indian Army and Society of Indian Defence Manufacturers (SIDM) /Confederation of Indian Industry (CII).
- DEFCOM provides an excellent opportunity for the industry to understand the requirements of the Armed Forces.

- The DEFCOM exhibition showcased cutting edge communication solutions from the industry and gave officers from the three services an opportunity to gain insights on technology and industry capabilities.

39. Automotive Mission Plan

- The Union Minister of Heavy Industries & Public Enterprises provided information about the Automotive Mission Plan in the Rajya Sabha.

Automotive Mission Plan (AMP):

- The AMP is the collective vision of the Government of India and the Indian automotive industry on where the vehicles, auto-components, and tractor industries should reach over the next ten years in terms of size, contribution to India's development, global footprint, technological maturity, competitiveness, and institutional structure and capabilities.
- The AMP 2006 – 16 has been largely successful in its endeavour to lay down the roadmap for development of the industry, the Minister informed.
- India has attracted significant quantum of investments from global and local original equipment manufacturers (OEMs) as well as component manufacturers, exceeding the target of Rs. 1,57,500 crores.
- The industry has also achieved the target of incremental employment creation of 25 million jobs over the period.
- The AMP 2016 – 26 has also been finalised by the government and industry.
- AMP 2016 seeks to define the trajectory of evolution of the automotive ecosystem in India including the glide path of specific regulations and policies that govern research, design, technology, testing, manufacturing, import/export, sale, use, repair, and recycling of automotive vehicles, components and services.

Objectives of AMP 2016 – 26:

- To propel the Indian automotive industry to be the engine of the 'Make in India'
- To make the Indian automotive industry a significant contributor to the 'Skill India' programme.
- To enhance universal mobility (safe and comfortable for every person keeping in mind environmental protection).
- To increase the net exports of the Indian automotive industry several-fold.
- To enable a comprehensive and stable Policy Dispensation.

40. National Milk Day

Why in News?

- The Union Minister for Fisheries, Animal Husbandry & Dairying addressed entrepreneurs, milk producer farmers, academia and media on the occasion of National Milk Day-2019.

India's Milk Production:

- Milk production has increased significantly from 137.7 million tonnes in 2013-14 to 187.75 million tonnes in 2018-19, thereby indicating an increase by 36.35%.

- The per capita availability of milk increased from 307 grams in 2013-14 to 394 grams in 2018-19. The annual growth rate of milk production during the period 2009-14 was 4.2%, which has increased to 6.4% during 2014-19.

- Since the last 20 years, India continues to be the largest producer of milk in the world.

- About 70 million rural households are engaged in dairying in India with 80% of total cow population.

National Milk Day:

- 26th November is celebrated as the National Milk Day in India.

- It is the birth anniversary of Dr. Verghese Kurien, the father of the White Revolution in India. India was transformed from a milk-deficient country to a self-sufficient milk-producing country, chiefly due to his efforts and initiatives.

- He institutionalised a cooperative model of farming and dairying where the farmers were cooperative owners of the organisation while being led and managed by professionals.

- Kurien also pioneered the use of buffalo milk to produce skim milk powder which was considered impossible by dairy experts around the globe. In India, buffalo milk was available aplenty compared to cow milk. He successfully implemented 'Operation Flood' which led to India becoming the leading milk producer of the world surpassing the USA in 1998. India is a leading name worldwide in cooperative dairying because of Amul's stupendous success.

41. Smart Accreditation

Why in News?

- The Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM) organised a one-day national workshop on accreditation of training centres on Skill Management & Accreditation of Training Centre (SMART) portal.

Highlights:

- Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM) is one of the flagship schemes of the Ministry of Housing and Urban Affairs that works towards alleviating urban poverty through strong community institutions, skill training, access to affordable credit for self-employment, support for street vendors and provision of shelters for the urban homeless. It was stressed in the workshop that from the next financial year, allocation of targets to training partners would be subject to their SMART accreditation.

- The states were advised to start the process of accreditation immediately, if not already done so. The workshop was aimed at providing handholding support to the states for streamlining the accreditation process on SMART and addressing any other specific query, especially in respect to Employment through Skill Training & Placement (EST&P) component of DAY-NULM.

What is SMART?

- Skill Management & Accreditation of Training Centre (SMART) provides a single-window IT application that focuses on accreditation, grading, affiliation and continuous monitoring of the training centres in the skill ecosystem.

- It intends to address the issues like quality benchmarks, fostering excellence in training centres, enabling trainees to make informed choices with regard to centres, etc.

- SMART aims at convergence of all stakeholders in the skill ecosystem in providing standardised infrastructure, accreditation and affiliation.

- SMART covers various central and state government schemes, private initiatives, CSR, etc. thus making it a scheme agnostic platform. The training provider can register on the SMART website and follow the prescribed process to get an accreditation. The centres will be graded on a rating scale of 1 star to 5 star depending on their scores.

42. Global Exhibition on Services 2019

Why in News?

- Global Exhibition on Services (GES) 2019 is being held in Bengaluru.

Highlights:

- In GES 2019, the Services Export Promotion Council (SEPC) is also looking to promote eSports. The eSports industry is expected to grow rapidly and in 2017 worldwide revenue generated in eSports market amounted to USD 655 million. The market is expected to generate close to USD 1.8 billion in revenue by 2022.

- SEPC is organizing Nations Cup (International eSports Championship) in association with Electronic Sports Federation of India (ESFI) during GES 2019.

- The Nations Cup will be one of the key highlights during GES and will open up multiple avenues for the services industry particularly in eSports, gaming and animation.

- An International Moot Court competition is also being organized during GES 2019 for young lawyers, who along with their seniors, will argue cases related to intellectual property rights.

- India is also aspiring to promote niche tourism like the Buddhist circuit, adventure and camping tourism. Uttar Pradesh is the partnering state mainly to promote the tourism sector and will have a separate state pavilion in GES 2019.

GES 2019:

- The GES is an exhibition every year to engage industry and governments across the world and to promote greater exchange of trade in services between India and the rest of the world.

- The first edition was held in 2015 in New Delhi and this is the fifth edition being held in Bengaluru, Karnataka.

- The exhibition is emerging as a regular global platform for the promotion of services cooperation in the world.

- It plays an important role in increasing trade in services, enhancing strategic cooperation and strengthening multilateral relationships between stakeholders from India and overseas.

- As a dynamic player in the global services sector, India has the potential to build its own brand for services exports where it can be a dominant player.

- GES helps in this direction in the following ways:

1. Showcases India's prowess across services sectors before a global audience.
2. Positions India globally in more services sub-sectors.
3. Generates concrete business outcomes.
4. Creates employment through leveraging services exports.

43. Fifth NITI Aayog–DRC Dialogue

Why in News?

- The Fifth Dialogue of NITI Aayog and Development Research Centre (DRC), of the State Council, People's Republic of China, was held in Wuhan, China.

Highlights:

- This is the first ministerial Dialogue between China and India since the informal meeting between Chinese President Xi Jinping and Indian Prime Minister Narendra Modi in Chennai.

- Based on the agreement at the Fourth Dialogue in Mumbai 2018, DRC and NITI Aayog had undertaken joint research in the areas of WTO reform and urbanization, whose preliminary findings were presented at the Fifth Dialogue as a key deliverable.

- The Sixth Dialogue will be convened in India in the second half of November 2020.

- There were sessions on the global economy, globalisation and macroeconomic policies in China and India, innovation and development, and potential for Sino-India trade and economic cooperation.

- Both sides affirmed their commitment to build a more inclusive global economic architecture and implement fair and reasonable trade rules, taking into account the need for safeguarding the interests of developing and less-developed nations.

- To advance high-quality development, the two sides decided to strengthen knowledge sharing and mutual learning in high-tech, digital economy, fiscal policy and jointly address the challenges arising from the environment, income gaps, etc.

- Emphasis was laid on promoting sustainable urbanization, development of Smart Cities, infrastructure and green transportation.

- Both sides also agreed to explore synergies in tourism; health sector; culture, language and people-to-people exchanges; and learn from respective best practices and create favourable conditions for facilitating ease-of-doing business by giving impetus to outbound and inbound investments.

44. Yuwaah Youth Skilling Initiative

Why in News?

- UNICEF has informed that they have launched 'YuWaah' Generation Unlimited in India.

YuWaah:

- YuWaah in is a multi-stakeholder alliance which aims to facilitate youth to gain relevant skills for productive lives and the future of work.

- The target age group of YuWaah includes adolescent girls and boys and its key mission is to promote access to foundational, transferable and 21stcentury skills for youth inside and outside formal education systems.

- This includes defining foundational skills, life skills and flexible learning and identifying and scaling impactful delivery models.
- It intends to create platforms to guide youth to market opportunities (career guidance, mentorship, internships, apprenticeships) and facilitate integration of career guidance in school education.

45. First-Ever National Startup Awards 2020

Why in News?

- The Department for Promotion of Industry and Internal Trade (DPIIT) has announced the institution of the first-ever National Startup Awards.

National Startup Awards 2020:

- The National Startup Awards seek to recognize and reward outstanding startups and ecosystem enablers that are building innovative products or solutions and scalable enterprises, with high potential of employment generation or wealth creation, demonstrating measurable social impact.
- The measure of success will not only be the financial gains for the investors but also the contribution to the social good.
- The Awards will recognize exceptional startups across various categories that are
- Providing innovative solutions to solve real problems and challenges for India,
- Developing innovative technologies, products and solutions from India to the world,
- Building businesses that are scalable, sustainable and responsible and delivering measurable developmental gains.
- The National Startup Awards will also reward exceptional Incubators and Accelerators as key building blocks of a robust startup ecosystem.
- The awards for startups will be given in 35 areas, classified into 12 broad sectors like agriculture, education, enterprise technology, energy, finance, food, health, Industry 4.0, space, security, tourism, and urban services.
- In addition, there are three special awards for startups from educational institutions, making an impact in rural areas and women entrepreneurs

1. Mitochondrial DNA

Why in News?

- A recent paper in the prestigious journal Nature claims to show that modern humans originated about 200,000 years ago in the region around northern Botswana.

Highlights:

- The scientists studied genetic data from many individuals from the KhoeSan peoples of southern Africa, who are thought to live where their ancestors have lived for hundreds of thousands of years. The researchers used their new data together with existing information about people all around the world to reconstruct in detail the branching of the Human Family Tree.

Mitochondrial DNA:

- Mitochondrial DNA is the small circular chromosome found inside mitochondria.
- These organelles found in cells have often been called the powerhouse of the cell.
- The mitochondria, and thus mitochondrial DNA, are passed almost exclusively from mother to offspring through the egg cell. The study focused just on mitochondrial DNA. This means it isn't mixed up with DNA from fathers and so is easier to track across the generations. The new study doesn't tell about the origin of the human genome but the place and time where our mitochondrial DNA appeared.

Why Mitochondrial DNA was studied?

- The fact that mitochondrial DNA comes almost only ever from mothers also means the story of its inheritance is much simpler than the histories of other genes. This implies that every bit of our genetic material may have a different origin, and have followed a different path to get to us.

2. IndiGen project

Why in News?

- The Council of Scientific and Industrial Research (CSIR) has finished conducting "whole-genome sequence" of a 1,008 Indians as part of a programme called "IndiGen".

IndiGen project:

- Programme funded by the Department of Biotechnology will sequence at least 10,000 Indian genomes. The CSIR's "IndiGen" project, as it is called, selected the 1,000-odd from

a pool of about 5,000 and sought to include representatives from every State and diverse ethnicity. Every person whose genomes are sequenced would be given a report.

- The project is and is also seen as a precursor to a much larger exercise involving other government departments to map a larger swathe of the population in the country.

- Anyone looking for a free mapping of their entire genome can sign up for "IndiGen". Those who get their genes mapped will get a card and access to an app which will allow them and doctors to access information on whether they harbour gene variants that are reliably known to correlate with genomes with diseases.

- The driving motive of the project is to understand the extent of genetic variation in Indians and learn why some genes — linked to certain diseases based on publications in international literature — do not always translate into diseases.

- Once such knowledge is established, the CSIR expects to tie up with several pathology laboratories who can offer commercial gene testing services.

Genome:

- A Genome is the DNA, or sequence of genes, in a cell.

- Most of the DNA is in the nucleus and intricately coiled into a structure called the chromosome. The rest is in the mitochondria, the cell's powerhouse.

- Every human cell contains a pair of chromosomes, each of which has three billion base pairs or one of four molecules that pair in precise ways.

- The order of base pairs and varying lengths of these sequences constitute the "genes", which are responsible for making amino acids, proteins and, thereby, everything that is necessary for the body to function. It is when these genes are altered or mutated that proteins sometimes do not function as intended, leading to disease.

Genome Sequencing:

- Sequencing a genome means deciphering the exact order of base pairs in an individual. This "deciphering" or reading of the genome is what sequencing is all about.

- It has been known that the portion of the genes responsible for making proteins — called the exome — occupies about 1% of the actual gene. Rather than sequence the whole gene, many geneticists rely on "exome maps" (that is the order of exomes necessary to make proteins).

- However, it has been established that the non-exome portions also affect the functioning of the genes and that, ideally, to know which genes of a person's DNA are "mutated" the genome has to be mapped in its entirety.

India's Effort:

- While India, led by the CSIR, first sequenced an Indian genome in 2009, it is only now that the organisation's laboratories have been able to scale up whole-genome sequencing and offer them to the public.
- Globally, many countries have undertaken genome sequencing of a sample of their citizens to determine unique genetic traits, susceptibility (and resilience) to disease. This is the first time that such a large sample of Indians will be recruited for a detailed study.
- Under "IndiGen", the CSIR drafted about 1,000 youth from across India by organising camps in several colleges and educating attendees on genomics and the role of genes in disease. Some students and participants donated blood samples from where their DNA sequences were collected.

3. Dwarf Planets

Why in News?

- As of today, there are officially five dwarf planets in our Solar System. Now, there is a claimant for a sixth dwarf planet.

Hygiea: New Dwarf in the Race:

- Using observations made through the European Space Organization's SPHERE instrument at the Very Large Telescope (VLT), astronomers have now found Hygiea may possibly be a dwarf planet.
- The most famous is Pluto, downgraded from the status of a planet in 2006. The other four, in order of size, are Eris, Make, Haumea and Ceres.
- Called Hygiea, it has so far been taken to be an asteroid. It lies in the asteroid belt between Mars and Jupiter.
- If it qualifies, Hygiea will be the smallest dwarf planet in the Solar System.

What makes a Hygiea Dwarf?

- The International Astronomical Union sets four criteria for a dwarf planet, and Hygiea already satisfies three — it orbits around the Sun, it is not a moon, and it has not cleared the neighbourhood around its orbit. The fourth requirement is that it have enough mass that its own gravity pulls it into a roughly spherical shape. According to the new study, VLT observations now show Hygiea satisfied that condition, too.
- This is the first-time astronomers have observed Hygiea in high resolution to study its surface and determine its shape and size.

---

4. Cloud Seeding Technology

Why in News?

- Haryana Dy. CM has written to PM Modi, requesting him to "undertake cloud seeding plan to combat the air pollution engulfing Delhi and NCR".

Cloud Seeding:

- Cloud seeding is a kind of weather modification technology to create artificial rainfall.
- It works only when there are enough pre-existing clouds in the atmosphere.
- Rain happens when moisture in the air reaches levels at which it can no longer be held, and cloud seeding aims to facilitate and accelerate that process by making available chemical 'nuclei' around which condensation can take place.
- These 'seeds' of rain can be the iodides of silver or potassium, dry ice (solid carbon dioxide), or liquid propane. The seeds can be delivered by plane or simply by spraying from the ground.

Existing Practices in world:

- Cloud seeding is not new to India and it has earlier been attempted in Karnataka, Andhra Pradesh and Maharashtra to address drought.
- Similar experiments of cloud seeding had earlier been tried in Australia, America, Spain and France.
- In United Arab Emirates, the cloud seeding technique led to creation of 52 storms in Abu Dhabi.
- Till last year, IMD had around 30 successful incidents of seeding.
- Also, such seeding is routine in Russia and other cold countries where the technique is used to disperse fog at the Airports.

IIT Kanpur study:

- The scientists at IIT Kanpur had prepared a project to induce artificial rain via cloud seeding to clear smog in Delhi.
- Officials in the Environment Ministry had approved the project.
- The project demanded an aircraft of National Remote Sensing Agency — an ISRO-affiliated body — to fly into the clouds.
- It would inject silver iodide that would lead to the formation of ice crystals, making the clouds denser and causing them to condense into rain and settle atmospheric dust and clearing the sky.

- It was in 2018 when IIT Kanpur had got all the clearances from DGCA and Defence and Home ministries for the project. But due to non-availability of the aircraft, the project could not take off.

- In May 2019, Karnataka Cabinet approved a budget of Rs 91 crore for cloud seeding for a period of two years. It involved two aircraft spraying chemicals on moisture-laden clouds to induce rainfall.

- It was expected to begin by June end and continue for three months.

- Hindustan Aeronautics Limited (HAL) had also partnered with IIT Kanpur and agreed to provide Dornier aircraft and their pilots to provide logistical support to the project.

How Successful is the Cloud Seeding Technology?

- The Pune-based IIMT has been carrying out cloud seeding experiments for several years now.

- These experiments have been done in areas around Nagpur, Solapur, Hyderabad, Ahmedabad, Jodhpur, and recently Varanasi.

- The success rate of these experiments in inducing rains is about 60 to 70 per cent, depending on local atmospheric conditions, the amount of moisture in the air and cloud characteristics.

- Apart from IITM, some private companies also offer cloud-seeding services.

- It is these companies that have been engaged by Maharashtra and Karnataka in the last few years. These also received mixed success.

5. NASA's First Electric Plane - X-57 Maxwell

Why in News?

- NASA unveiled its first all-electric experimental aircraft X-57 Maxwell which was being developed since 2015.

Maxwell:

- The Maxwell is the latest in a line of experimental aircraft the NASA.

- It has been developed over many decades for many purposes, including the bullet-shaped Bell X-1 that first broke the sound barrier and the X-15 rocket plane flown by Neil Armstrong before he joined the Apollo moon team.

- The two largest of 14 electric motors that will ultimately propel the plane are powered by specially designed lithium ion batteries.

- The Maxwell will be the agency's first crewed X-plane to be developed in two decades.

- The lift propellers will be activated for take-off and landings, but retract during the flight's cruise phase.
- Electric motor systems are more compact with fewer moving parts than internal-combustion engines, they are simpler to maintain and weigh much less, requiring less energy to fly.
- They also are quieter that conventional engines.

6. Global Cooling Prize

Why in News?

- The Union Minister for Science & Technology, Earth Sciences and Health & Family Welfare to announce the Global Cooling Prize.

Global Cooling Prize (GCP):

- In 2018, the Ministry of Science & Technology instituted a new prize for innovative cooling technologies that could reduce the climate impact of Residential Air Conditioning (RAC) at least by five times, called the Global Cooling Prize, under the Mission Innovation (MI) programme.
- The award carries a total prize money of $3 million.
- The GCP was launched by the Department of Science & Technology (DST – Under the S&T Ministry), in partnership with the Bureau of Energy Efficiency and the Ministry of Environment, Forest and Climate Change, jointly with Rocky Mountain Institute (RMI).
- The RMI is an independent non-profit research institute and think tank founded in 1982 in the US.
- GCP aims to spur development of a residential cooling solution that has at least five times less climate impact than today's standard products.
- India has proposed to support this innovation prize with a grant up to $2 million, which would fund the India-based teams in developing working prototypes of their innovative cooling technology designs including model energy efficient building.
- GCP received 139 applications from 31 countries around the globe from innovators, start-ups, research institutes, universities, and key AC industry manufacturers, out of which the maximum (45) are from India.
- Mission Innovation (MI) is a global initiative of 24 countries and the European Union to accelerate global clean energy innovation. MI identified "Affordable Heating and Cooling of Building Innovation Challenge" as one of the seven innovation challenges.

Why in News?

- The most distant space object ever seen up close has been recently named as 'Arrokoth'.
- It was earlier nicknamed as Ultima Thule.

Arrokoth:

- The International Astronomical Union and Minor Planets Center, the global body for naming Kuiper Belt objects have given this name.
- It was discovered in 2014 with the Hubble Space Telescope, which is operated by the Space Telescope Science Institute in Baltimore.
- Nasa's New Horizons spacecraft flew by the snowman figured ice mass in December 2018, some 1.6 billion kilometres beyond Pluto.
- The New Horizons team of NASA proposed the name to the International Astronomical Union and Minor Planets Center.
- For the New Horizons team, it took some months to finalise this name. In the language of the Powhatan tribe, Arrokoth means "sky".
- The team got the approval from the elders of the Powhatan tribe to assign it to their new found "baby".

New Horizons Mission:

- NASA launched the New Horizons mission in January 2006.
- After crossing by Pluto in 2015, in 2019 it flew by Arrokoth. This remains the "farthest flyby ever conducted."
- Kuiper Belt:
- The Kuiper Belt is a disk-shaped region found in the outer solar system, past the orbit of Neptune.
- It is known as the third zone of the solar system, after the zone hosting the gas planets in our solar system.
- It contains hundreds of millions of small icy bodies that are thought to be left over material from the formation of the outer planets.
- At least three dwarf planets are located in the Kuiper belt: Pluto, Haumea and Makemake.
- Also, some of the solar system's moons are thought to have originated there, such as Neptune's Triton and Saturn's Phoebe.

8. Spicules in the Sun

Why in News?

- One of the puzzles concerning is the Sun's surface and atmospheric temperature.
- A team of researchers has observed the reason why Sun's atmosphere is hotter than its Surface.

Anomaly of the Sun's temperature:

- The temperature at the core of the Sun is nearly 15 million degrees Celsius, while that at its surface layer, known as the photosphere, is merely 5,700 degrees C.
- The natural thing to expect is that still further outwards, in its atmosphere, known as the corona, the temperatures would be comparable to that at the surface (photosphere).
- However, the temperature of the corona is much higher.
- It starts increasing outside the photosphere, reaching a value of about one million degrees or more in the corona.

Coronal Heating:

- One would expect that as there are no extra sources of heat, when you move away from a hot object, the temperature steadily decreases.
- However, with respect to the Sun, after dropping to a low, the temperature again rises to one million degrees in the corona which stretches over several million kilometres from the surface of the Sun. This implies there should be a source heating the corona. The puzzle of coronal heating has been tackled by many theories.
- Now, in a research paper, the team of solar physicists has made observations and matched it with an analysis that explains this conundrum.

Spicules in the Sun:

- The key to the puzzle lies in geyser-like jets known as solar spicules that emanate from the interface of the corona and the photosphere.
- While in a photograph these look like tiny hair like projections, they are in fact 200-500 kilometres wide and shoot up to heights of about 5,000 km above the solar surface.
- It has been suspected that these spicules act as conduits through which mass and energy from the lower atmosphere bypass the photosphere and reach the corona.
- These spicules heat up while propagating upward, reaching the coronal temperature.
- They are made of plasma – a mixture of positive ions and negatively charged electrons. The coronal plasma emits light in extreme ultraviolet.

9. Cartosat-3

Why in News?

- ISRO has announced that Cartosat-3 will be flown on the PSLV-C47 vehicle, subject to weather conditions.

Cartosat-3:

- It is an advanced earth imaging and mapping satellite. It would also boost the military's space surveillance.
- The satellite will be placed in an orbit of 509 km at an inclination of 97.5 degrees.
- Cartosat-3, with an ISRO-best resolution of 25 cm, will be the first of a series of high resolution, third generation satellites planned for observing the Earth.
- The satellite will be able to pick up objects of that size (25 cm) from its orbital perch about 509 km away. This will make Cartosat-3 among the few sharpest, if not the best, civil earth imagers worldwide.
- Cartosat-3 will also have multi-spectral (captures light from across the electromagnetic spectrum) capabilities, which will help the military zoom in on enemy hideouts and terror hubs.
- ISRO's rocket PSLV-XL will put into orbit Cartosat-3 and 13 commercial Nano satellites from the US. The 13 small U.S. customer satellites riding as secondary passengers will be placed in a polar orbit.

10. Space Internet

Why in News?

- The SpaceX, the world's leading private company in space technology, last week fired a spray of 60 satellites into orbit. Following last week's launch, the company has now deployed 122 satellites in orbit with a target of 12000 in all.

Space Internet:

- SpaceX announced the satellite Internet constellation in January 2015, and launched two test satellites in February 2018.
- The Starlink network, as the project is called, is one of several ongoing efforts to start beaming data signals from space, and also the most ambitious.
- This launch is the first operational batch of what is intended to eventually evolve into a constellation of nearly 12,000 satellites.

- They are aimed at providing low-cost and reliable space-based Internet services to the world.

Why Space Internet Services?

- This is mainly to ensure that reliable and uninterrupted Internet services is ensured across the world

- Currently, about 4 billion people, more than half the world's population, do not have access to reliable Internet networks.

- And that is because the traditional ways to deliver the Internet — fibre-optic cables or wireless networks — cannot take it everywhere on Earth.

- In many remote areas, or places with difficult terrain, it is not feasible or viable to set up cables or mobile towers.

- Signals from satellites in space can overcome this obstacle easily.

Orbital Details:

- Space-based Internet systems have, in fact, been in use for several years now — but only for a small number of users.

- Also, most of the existing systems use satellites in geostationary orbit.

- This orbit is located at a height of 35,786 km over the Earth's surface, directly above the Equator.

- Satellites in this orbit move at speeds of about 11,000 km per hour, and complete one revolution of the Earth in the same time that the earth rotates once on its axis.

- To the observer on the ground, therefore, a satellite in geostationary orbit appears stationary.

- Owing to their lower height, their signals cover a relatively small area. As a result, many more satellites are needed in order to reach signals to every part of the planet.

- Additionally, satellites in these orbits travel at more than double the speed of satellites in geostationary orbit — about 27,000 km per hour — to balance the effects of gravity.

Significance of Geostationary Orbit:

- One big advantage of beaming signals from geostationary orbit is that the satellite can cover a very large part of the Earth.

- Signals from one satellite can cover roughly a third of the planet — and three to four satellites would be enough to cover the entire Earth.

- Also, because they appear to be stationary, it is easier to link to them.

- But satellites in geostationary orbit also have a major disadvantage. The Internet is all about transmission of data in (nearly) real time.
- However, there is a time lag — called latency — between a user seeking data, and the server sending that data. And because data transfers cannot happen faster than the speed of light (in reality, they take place at significantly lower speeds), the longer the distance that needs to be covered the greater is the time lag, or latency.

Limitations:

- Three issues have been flagged — increased space debris, increased risk of collisions, and the concern of astronomers that these constellations of space Internet satellites will make it difficult to observe other space objects, and to detect their signals.
- To put things in perspective, there are fewer than 2,000 operational satellites at present, and fewer than 9,000 satellites have been launched into space since the beginning of the Space Age in 1957. Most of the operational satellites are located in the lower orbits.
- The European Space Agency (ESA) this year had to perform, for the first time ever, a "collision avoidance manoeuvre" to protect one of its live satellites from colliding with a "mega constellation".

11. Li-Ion Cell Technology

Why in News?

- ISRO has transferred its indigenous technology to produce space-grade Li-Ion cells to Bharat Heavy Electricals Limited (BHEL).

Highlights:

- The agreement for the technology transfer was signed between ISRO and BHEL in March 2019. This production facility is primarily targeting to meet Li-Ion Cell requirements for ISRO and other strategic sectors.
- BHEL can also produce and sell Li-Ion cells for meeting other national/commercial applications by suitably modifying the space-grade cell which can lead to cost reduction.
- BHEL is in the process of establishing the Li-Ion production facility near Bangalore in Karnataka. Various equipment (both indigenous and imported) for establishing this facility are procured and being commissioned.
- ISRO has already provided all technical documentation for establishing the production plant as well as hands-on training in various production activities for BHEL staff at ISRO's Facilities.

4. ECONOMY

1. 7ᵗʰ INDIA – US Economic and Financial Partnership meeting

Why in News?

- The 7ᵗʰ India – US Economic and Financial partnership meeting was held in New Delhi.

Highlights:

- The meeting was co-chaired by Finance Minister Nirmala Sitharaman and US Secretary of Treasury Steven T Mnuchin.

- The Seventh Meeting of the India-U.S. Economic and Financial Partnership is meant to deepen the economic partnership between the two countries as a framework, commensurate with the growing importance of economic relations and significant business and cultural ties that already exist between the two nations.

- During meeting both sides took stock of the efforts undertaken to further improve mutual cooperation on a wide range of multilateral subjects including anti-money laundering and combating financing of terrorism. India and the United States discussed policies to stimulate economic growth and noted the significant steps India has taken to strengthen the financial sector, including Public Sector Bank recapitalization and plans to merge some of the state-owned banks. Both sides also discussed capital flows, investment promotion related issues, and the external economic environment.

- Both sides are committed to greater economic cooperation on global economic issues, both bilaterally and multilaterally in the G20 and other fora.

- India and the United States look forward to enhanced collaboration to address the challenges to global growth under the G20 Presidency of Saudi Arabia.

- As India gears up for the 2022 Presidency of the G20, the United States stands ready to support India in hosting a successful and focused Presidency.

- The United States and India recently signed a Memorandum of Understanding for cooperation, coordination, consultation and exchange of information relating to the Regulation of the Insurance Sector.

- India has set up the National Infrastructure and Investment Fund (NIIF) to catalyze private institutional investment in Indian infrastructure, for which the United States has provided technical support.

- The United States helped the Indian city of Pune successfully launch municipal bonds in 2017 to finance local infrastructure needs to support the government's Smart Cities initiative.

2. Relaxed Norms May Boost Tea Tourism

Why in News?

- The West Bengal government has allowed the tea industry to use 15% of land in a tea garden for Other Economic Activities, Including Tea Tourism and Horticulture.

Highlights:

- In 2015, the West Bengal Government had amended relevant schedules of the West Bengal Estates Acquisition Act to allow tea estates to use leasehold land for horticulture, medicinal plant farming, dairy farms and micro hydel project besides tea tourism projects. However, this had capped the relaxation to certain fixed proportions for various uses at 20 acres.

- The West Bengal government recently allowed the tea industry to use 15% of land in a tea garden for other economic activities, including tea tourism and horticulture. However, it bars housing projects.

- Under the new rules the cap has been increased to 150 hectares. By not allowing housing activities, the government has communicated its resolve not to disturb the present ecosystem.

Significance:

- The tea industry has been plagued by rising costs of production and stagnant prices. In this scenario, many gardens have begun incurring losses. The Indian Tea is facing competition from other major producers like China and Sri Lanka.

- Productivity and quality too have been an issue, especially in view of the ageing bushes, which many estate owners have failed to rejuvenate, leading to low yields and poor quality.

- In this backdrop the present rules provide scope for diversification of farmer's income.

- The move may induce garden owners to promote tourism, horticulture projects and other allied economic activities.

- There are other profitable crops cultivable in West Bengal and the government's initiative would allow it on a commercial scale.

- The tea industry in West Bengal is witnessing a major boost to employment with the State government's relaxation of norms for use of leasehold land in a tea garden.

- This will help avoid rural urban migration issue and allow for balanced development of all the regions.

3. 8th Indo German Energy Forum (IGEF) 2019

Why in News?

- The 8th meeting of the Indo – German Energy Forum concluded in New Delhi.

Indo-German Energy Forum (IGEF):

- The Indo-German Energy Forum (IGEF) provides a dialogue platform for high-level policy makers, financial institutions, industry and research organizations to deepen and enhance the bilateral cooperation for the energy transition in Germany and India.

- Since its establishment in 2006, the Indo-German Energy Forum has successfully intensified Indo-German Cooperation in the areas of energy security, energy efficiency and renewable energies, investment in energy projects as well as collaborative research and development.

- The high-level steering committee, also called "Forum", provides a platform for high-level policy makers and representatives from industry, associations, financial institutions and research organizations from both countries.

- The IGEF agenda is essentially defined by four Subgroups which convene on a regular basis and bring together experts from industry, research institutions and state authorities on a working level in India and Germany:
  - ✓ Subgroup I on Enhancement of Power Plants
  - ✓ Subgroup II on Renewable Energies
  - ✓ Subgroup III on Energy Efficiency
  - ✓ Subgroup IV on Green Energy Corridors

- In the 8th Indo German Energy Forum (IGEF) 2019, both the sides finalized the roadmap for future collaboration between the two countries which, inter-alia, include
  - ✓ Flexibilization of existing coal fired power plants
  - ✓ Promoting niche markets for Solar Energy,
  - ✓ Promotion of energy efficiency in buildings through ECBC, building materials and credit lines for financing corresponding measures and RE evacuation through state-of-the-art intra-state.
  - ✓ Inter-state transmission grid infrastructure.

4. First ever movement of container cargo on Brahmaputra (NW -2)

Why in News?

- The first cargo consignment will sail on National Waterway-2 from Haldia Dock Complex (HDC) to Pandu in Guwahati.

NW-2:

- National Waterway 2 (NW-2) is a section of the Brahmaputra River having a length of 891 km between the Bangladesh border near Dhubri and Sadiya in Assam.

- It was declared as NW No. 2 on 1 September 1988.

- It has only one fixed terminal namely the Pandu Port while rest are floating which include Dhubri Port, Jogighopa, Tezpur, Silghat, Dibrugarh, Jamuguri, Bogibil, Saikhowa and Sadiya

- NW-1 has witnessed healthy growth with the augmentation of navigation capacity of Ganga under Jal Marg Vikas Project.

- The traffic on NW-1 has grown from 5.48 million tonnes in 2017-18 to 6.79 million tonnes in 2018-19.

- Out of the total traffic of 6.79 million tonnes on NW-1, approximately 3.15 million tonnes is the EXIM trade between India and Bangladesh using the Indo Bangladesh Protocol (IBP) routes.

- Indo Bangladesh Protocol (IBP) route:

- The Protocol on Inland Water Transit and Trade (PIWTT) between India and Bangladesh allows mutually beneficial arrangements for the use of their waterways for movement of goods vessels of both countries.

- The IBP route extends from Kolkata (India) on NW-1 to Silghat (Assam) on NW-2 (River Brahmaputra) and Karimganj (Assam) on NW-16 (River Barak).

- In addition to the above, India and Bangladesh have taken major steps to enhance utilization of waterways in the recent past.

- An SOP to facilitate the movement of goods to and from India through Chittagong and Mongla Ports in Bangladesh has been signed by the two countries on 5th October 2019.

- The proximity of these two ports will reduce logistics cost and improve trade competitiveness of North East states.

5. Adjusted Gross Revenue (AGR) in Telecom Sector

Why in News?

- In a strongly-worded order, the Supreme Court of India upheld the Department of Telecom (DoT)'s interpretation of "adjusted gross revenue" (AGR).
- This came as a huge blow to telecom service providers.
- Following the order, the telcos are now staring at dues of an estimated ₹1.4 lakh crore, which needs to be paid to the government within three months.
- Most industry players and analysts have argued that the payout of the huge amount could be the final straw for the already distressed sector.

AGR:

- Adjusted Gross Revenue (AGR) is the usage and licensing fee that telecom operators are charged by the Department of Telecommunications (DoT).
- It is divided into spectrum usage charges and licensing fees, pegged between 3-5 percent and 8 percent respectively.
- The definition of AGR has been under litigation for 14 years.
- While telecom companies argued that it should comprise revenue from telecom services, the DoT's stand was that the AGR should include all revenue earned by an operator, including that from non-core telecom operations.
- The AGR directly impacts the outgo from the pockets of telcos to the DoT as it is used to calculate the levies payable by operators.
- Currently, telecom operators pay 8% of the AGR as licence fee, while spectrum usage charges (SUC) vary between 3-5% of AGR.

Why do Telcos need to pay out Large Amounts?

- Telecom companies now owe the government not just the shortfall in AGR for the past 14 years but also an interest on that amount along with penalty and interest on the penalty.
- While the exact amount telcos will need to shell out is not clear, as in a government affidavit filed in the top court, the DoT had calculated the outstanding licence fee to be over ₹92,000 crore.
- However, the actual payout can go up to ₹1.4 lakh crore as the government is likely to also raise a demand for shortfall in SUC along with interest and penalty.
- Of the total amount, it is estimated that the actual dues is about 25%, while the remaining amount is interest and penalties.

Concerns:

- The telecom industry is reeling under a debt of over ₹4 lakh crore and has been seeking a relief package from the government.
- Even the government has on various occasions admitted that the sector is indeed undergoing stress and needs support.
- Giving a ray of hope to the telecom companies, the government recently announced setting up of a Committee of Secretaries to examine the financial stress in the sector, and recommend measures to mitigate it.

6. Khadi gets separate unique HS code

Why in News?

- Khadi has once again come out of its customary veil, marking its presence in the exclusive HS code bracket, issued by the central government to categorize its products in export.

Highlights:

- Khadi and Village Industries products are eco-friendly and natural and are in great demand in the International Markets.
- Recognizing its potential to generate exports, the Ministry of Commerce had taken various measures to boost the export of Khadi products.
- However, in the absence of separate HS code, the export of Khadi products was difficult to categorize and calculate.
- Allocation of separate HS code for this signature fabric of India will help in making the export of Khadi, exclusively categorized from the general league of textile products.
- This move will help in keeping a constant eye on khadi export figures and also it will also help in planning khadhi export strategies.
- HS Code:
- HS Stands for Harmonized System and it is a six-digit identification code.
- It was developed by the WCO (World Customs Organization).
- Customs officers use HS Code to clear every commodity that enters or crosses any international border.

7. RBI panel moots tighter norms for CICs

Why in News?

- In 2018, Infrastructure Leasing and Financial Company (IL&FS), a core Investment company (CIC) with over 300 subsidiaries, defaulted on its payment following which over Rs 90000 crore worth of combined banking sector exposure was declared as non-performing or bad asset in the subsequent months.

- Experts have been seeking a review of CIC guidelines ever since.

- A working group formed by Reserve Bank of India has now suggested simplified structure for CICs.

Core Investment Companies (CIC):

- A core investment companyis a non-banking financial company (NBFC) which carries on the business of acquisition of shares and securities and holds not less than 90 per cent of its net assets in the form of investment in equity shares, preference shares, bonds, debentures, debt or loans in group

- In August 2019, there were 63 CICs registered with RBI.

Concerns:

- Unlike NBFCs which are required to constitute board level committees, no such standards are mandated for CICs.

- The same director could be part of boards of multiple companies in a group, including CICs.

- In a few cases, the working group said, "it has been observed that the CIC had lent funds to group companies at zero percent rate of interest with bullet repayment of 3-5 years and without any credit appraisal".

- Rules for Core Investment Companies as suggested by the RBI Panel:

- It is suggested that such entities should only have a two-tier structure, and stronger boards, with at least 50% independent directors.

- The group has also recommended formation of board level committees for audit and remuneration for CICs as well as group risk management committees to address the concerns over corporate governance that were compromised over the years with opaque ownership structures in large conglomerates.

- At least one third of the board should comprise of independent members if chairperson of the CIC is non-executive, otherwise at least half of the board should comprise of independent member.

- It was also suggested that Audit Committee of the Board should be chaired by an independent director and the committee should meet at least once a quarter.
- It is suggested that capital contribution by a CIC in a step-down CIC, over and above 10% of its owned funds, should be deducted from its adjusted net worth.
- Step-down CICs should not be permitted to invest in any other CIC, but can 'freely' invest in other group companies. The number of layers of CICs in a group should be restricted to two. As such, any CIC within a group shall not make investment through more than a total of two layers of CICs, including itself.

8. Financial Stability and Development Council (FSDC)

Why in News?

- The Finance Minister chaired the 21st meeting of the Financial Stability and Development Council (FSDC).

Highlights:

- The Council reviewed the current global and domestic macro-economic situation and financial stability and vulnerabilities issues, including inter-alia, those concerning NBFCs and Credit Rating Agencies.
- The Council reviewed the action taken by members on the decision taken by FSDC earlier and held discussions on the proposals submitted for further strengthening of the resolution framework and framework for cyber security of the financial sector.
- The FSDC is an apex-level body consisting of all regulators and the Finance Ministry. Chaired by the Union Finance Minister, it is the highest body on all matters concerned with financial stability.

9. Steel Scrap Recycling Policy

Why in News?

- Ministry of Steel has issued the Steel Scrap Recycling Policy.

Background:

- Steel Ministry's endeavor is to develop a globally competitive steel industry by adopting state of the art environment friendly technologies.
- Ferrous Scrap being the primary raw material for electric arc furnace (EAF) and induction furnace (IF) based steel production, the policy envisages a framework to facilitate and promote establishment of metal scrapping centers in India.

- This will ensure scientific processing & recycling of ferrous scrap generated from various sources and a variety of products.
- The policy framework shall provide standard guidelines for collection, dismantling and shredding activities in an organized, safe and environmentally sound manner.
- Steel is a material most conducive for circular economy as it can be used, reused and recycled infinitely.
- While iron ore remains the primary source of steel making, used or re-used steel in the form of Scrap is the secondary raw material for the steel industry.
- Indian steel industry is characterized by the presence of a large number of small steel producers who utilize scrap with other inputs in EAF/IF for steel making.

Objectives:

- To promote circular economy in the steel sector.
- To promote a formal and scientific collection, dismantling and processing activities for end of life products that are sources of recyclable (ferrous, non- ferrous and other non-metallic) scraps which will lead to resource conservation and energy savings and setting up of an environmentally sound management system for handling ferrous scrap.
- Processing and recycling of products in an organized, safe and environment friendly manner. To evolve a responsive ecosystem by involving all stakeholders.
- To produce high quality ferrous scrap for quality steel production thus minimizing the dependency on imports.
- To decongest the Indian cities from end-of-live vehicle (ELVs) and reuse of ferrous scrap.
- To create a mechanism for treating waste streams and residues produced from dismantling and shredding facilities in compliance to Hazardous & Other Wastes (Management & Trans boundary Movement) Rules, 2016 issued by MoEF & CC.
- To promote 6Rs principles of Reduce, Reuse, Recycle, Recover, Redesign and Remanufacture through scientific handling, processing and disposal of all types of recyclable scraps including non-ferrous scraps, through authorized centers / facility.

Significance:

- The availability of scrap is a major issue in India and in 2017 the deficit was to the tune of 7 million Tons. This was imported at the cost of more than Rs. 24,500 crores (approx.) in 2017-18.
- The gap between demand and supply is can be reduced in the future and the country may be self-sufficient by 2030.

- This is mainly because with the increase in consumption of steel in the recent past and ELVs, the generation of scrap is likely to be increased considerably.

- This scrap has to be channelized so that the same can be utilized for steel production in an environmentally friendly manner.

- The scrapping policy shall ensure that quality scrap is available for the steel industry.

- National Steel Policy 2017:

- National Steel Policy 2017 (NSP-2017) aims to develop a globally competitive steel industry by creating 300 Million TPA Steel production capacity by 2030 with a contribution of 35-40% from EAF/IF route.

- The availability of raw materials at competitive rates is imperative for the growth of the steel industry and to achieve NSP-2017 target. Thus, the availability of right quality of scrap, in adequate quantity is one of the critical factors for the future growth for both EAF/IF sector & primary sector.

- Scrap based steel making technologies have been envisaged as one of the important options to reduce GHG emission intensity. This shall feature as an important initiative of the steel sector to minimize Green House Gas (GHG) emissions.

10. COCSSO

Why in News?

- Ministry of Statistics and Programme Implementation (MoSPI) is organizing 27th Conference of Central and State Statistical Organizations (COCSSO) in Kolkata.

Highlights:

- The Conference, a major national annual event, provides a platform for discussion and improved coordination between the Central and State Statistical agencies for enhancing the efficiency of the Indian Statistical System.

- The theme of this year's Conference "Sustainable Development Goals (SDGs)". It has been chosen for intensive and focused discussions aimed at filling the data gaps and improvement of timelines/quality in SDG monitoring.

- The next important step on SDGs is preparation of the State Indicator Framework (SIF) so that monitoring of progress in respect of SDGs can take place at the State and sub-State levels.

- 27th COCSSO assumes greater Significance for proposing the way forward for evolving SIF through a wider consultation with State Governments/UTs and other stakeholders.

National Indicator Framework (NIF):

- MoSPI, which is responsible for monitoring the progress of SDGs, has developed the National Indicator Framework (NIF) for monitoring country's progress on SDGs.
- NIF has been developed in consultations with Central Ministries and State/UT Governments.
- MoSPI has also released the NIF Baseline Report 2015-16 setting the benchmark for measuring SDGs progress up to 2030.

11. Base Year in GDP Calculations

Why in News?

- At a time when India is facing an economic slowdown in GDP growth the Ministry of Statistics and Programme Implementation announced that the new base year for the GDP series will be decided in a few months.

Base Year:

- The base year of the national accounts is chosen to enable inter-year comparisons.
- It gives an idea about changes in purchasing power and allows calculation of inflation-adjusted growth estimates. The last series has changed the base to 2011-12 from 2004-05.
- The base year is a benchmark with reference to which the national account figures such as gross domestic product (GDP), gross domestic saving, gross capital formation is calculated.

How is a base year calculated?

- In India, the first estimates of national income were published by the Central Statistical Organisation (CSO) in 1956 taking 1948-49 as the base year.
- With the gradual improvement in availability of data, the methodology was revised.
- Earlier, CSO depended on the population figures in the National Census to estimate the workforce in the economy.
- Therefore, the base year always coincided with the census figures like 1970-71, 1980-81 etc. Subsequently, CSO decided that the National Sample Survey (NSS) figures on the workforce size were more accurate and hence, the base year would change every five years when the NSS conducted such survey.
- This system was started from 1999 when the base year was revised from 1980-81 to 1993-94.

Need and Changes:

- The base year prices are termed as at constant prices. This reduces all the data to a comparable benchmark, base year price.
- The base year is a representative year which must not experience any abnormal incidents such as droughts, floods, earthquakes etc.
- It is a which is reasonably proximate to the year for which the national accounts statistics are being calculated.
- The base year has to be revised periodically in order to reflect the structural changes taking place within an economy, such as increasing share of services in GDP.
- The more frequently the base year can be updated, the more accurate the statistics will be.

12. International Seed Treaty

Why in News?

- A session of the Governing Body of International Treaty of Plant Genetic Resources for Food and Agriculture (ITPGRFA) better known as Seed Treaty is recently held.

Seed Treaty:

- ITPGRFA also known as Seed Treaty is a comprehensive international agreement for ensuring food security through the conservation, exchange and sustainable use of the world's plant genetic resources.
- It aims for food and agriculture (PGRFA), as well as the fair and equitable benefit sharing arising from its use.
- The governing body meets biennially and India is a signatory to the treaty.

Objectives:

- Farmers' Contribution: To recognize the contribution of farmers to the diversity of crops,
- Access and Benefit Sharing: Establish a global system to provide farmers, plant breeders and scientists with access to plant genetic materials,
- Sustainability: To conserve and sustainably use plant genetic resources for food and agriculture, and fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity.
- Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act:
- The PPV&FR Act, 2001 was enacted to grant intellectual property rights to plant breeders, researchers and farmers who have developed any new or extant plant varieties.

- The rights granted under this Act are exclusive right to produce, sell, market, distribute, import and export the variety.

- According to the act, a farmer is entitled to save, use, sow, resow, exchange, share or sell his farm produce including seed of a variety protected under the PPV&FR Act, 2001 except the brand name.

- The Act is compliant to Article-9 of the Seed Treaty.

- A few months back in April 2019, PepsiCo sued Gujarati farmers by invoking the provisions of the act.

- The PPV&FR Authority has registered about 3631 plant varieties out of which 1597 (44%) belong to the farmers.

13. Largest FDI project of Indian Railways

Why in News?

- Indian Railways has entered into Procurement cum Maintenance Agreement with Madhepura Electric Locomotive Pvt. Ltd. (MELPL), a joint venture of Indian Railways and M/s Alstom.

- Highlights:

- Indian Railways and Alstom came together in 2015 to transform the heavy freight transportation landscape of the country.

- A landmark agreement worth 3.5 billion Euro was signed to manufacture 800 electric locomotives for freight service and its associated maintenance.

- This is the first time such High Horse Power locomotive is being tested on Broad Gauge network in the World by any Railways.

- As part of the project, factory along with township has been set up in Madhepura, Bihar with capacity to manufacture 120 locomotives per year.

Benefits:

- Indian Railways have taken decision to have 12000 horse power twin Bo-Bo design Locomotive with 22.5 T (Tonnes) axle load upgradable to 25Tonnes with design speed of 120 kmph.

- This locomotive will be game-changer for further movement of coal trains for Dedicated Freight Corridor.

- With the success of this project it will boost the "Make in India" programme of the Government of India. This will further develop ancillary units for locomotive components.

- The project will allow faster and safer movement of heavier freight trains.
- It will haul 6000T trains at maximum speed of 100 kmph.
- With 100% electrification, the new locomotive will not only bring down operational cost for Railways, the locomotive will also reduce the congestion faced by Indian Railways.
- This will be used to haul heavier trains such as coal and iron ore.

Significance:

- More than 300 Engineers from India and France are working in Bangalore, Madhepura and France on the Project.
- The project is expected to create more than 10,000 direct and indirect jobs in the country.
- In two year's time, more than 90% parts will be manufactured in India. This is a truly Make in India project.

14. International Symposium on Lighting (iSoL)

Why in News?

- Minister of Heavy Industries and Public Enterprises has inaugurated the International Symposium on Lighting (iSoL).

International Symposium on Lighting (iSoL):

- The International Centre for Automotive Technology (ICAT) organizes International Symposium on lighting (iSoL).
- The two days Symposium provides a common platform to professionals related directly or indirectly to the automotive lighting fraternity from all around the globe.
- The iSoL from 2009 has grown and transformed itself into a global event.
- ICAT has been associated with the field of lighting research and testing since 2006.
- Taking this commitment to a greater height, iSoL-2019 is aimed at creating a knowledge sharing platform ensuring the flow of information.

ICAT:

- The International Centre for Automotive Technology (ICAT), Manesar (Haryana) is located in the northern automotive hub of India.
- It is a leading world class automotive testing, certification and R&D service provider.
- It functions under the aegis of NATRiP (National Automotive Testing and R&D Infrastructure Project), Government of India.

15. IndiaSkills 2020

Why in News?

- The Minister of Skill Development and Entrepreneurship has announced the opening of online registrations for IndiaSkills 2020.

IndiaSkills 2020:

- It is a biennial competition to scout talent from the country, offering them a platform to showcase their skills at national and international competitions.
- IndiaSkills 2020 provides a platform for skilled and talented Indian youngsters to showcase their abilities at regional and national level competitions in over 50 skills.
- Regional legs of the competitions are organized across four zones, culminating at the national competition in Delhi.
- Winners of IndiaSkills will then get a chance to represent the country at the WorldSkills International Competition to be held in China in 2021.

Global competitors:

- The 22 winners of Indiaskills 2018 and their experts had represented the country with their outstanding performance at the WorldSkills International 2019 (WSK), held in Kazan, Russia.
- India won one gold, one silver, two bronze and 15 Medallions of Excellence at the biggest competition for skills.
- India ranked 13th among 63 countries that participated at WorldSkills International 2019, marking it to be the best finish for the country in the coveted skill championship.
- The last IndiaSkills competition was organized in 2018, wherein 22 states and more than 100 corporates participated, that gave 355 competitors a chance to display their skills across various skill competitions.

Benefits:

- The winners could get to showcase their talents at the WorldSkills 2021 competition to be held in Shanghai, which is an international platform and the world's largest skill competition.
- Candidates have a chance to enhance their careers is their choice of skill.
- Selected candidates will get trained by one of the best trainers in the world.
- Candidates will get international exposure and stand a chance to win a gold, silver or bronze medal for the country.

Who can apply for IndiaSkills 2020?

- Interested and eligible candidates must be born on or after 1 January 1999 for all skills apart from mechatronics, manufacturing team challenge, aeronautical engineering, cloud computing, cyber security and water technology, IT network cabling where competitors must be born on or after 1 January 1996.

- Mobile robotics, cyber security, landscape gardening, concrete construction work, and mechatronics are team skill competitions where a team of 2 individuals is required for the competition.

16. Household Consumer Expenditure Survey

Why in News?

- Govt has scrapped this year's NSOs Consumer expenditure survey over data quality.

Consumer Expenditure Survey:

- The Consumer Expenditure Survey (CES) is usually conducted at quinquennial intervals and the last survey on consumer expenditure was conducted in the 68th round (July 2011 to June 2012).

- It is conducted by National Statistical Office (NSO), MoSPI.

- It generates estimates of household Monthly Per Capita Consumer Expenditure (MPCE) and the distribution of households and persons over the MPCE classes.

- It is designed to collect information regarding expenditure on consumption of goods and services (food and non-food) consumed by households.

- The results, after release, are also used for rebasing of the GDP and other macro-economic indicators.

Highlights of the 2018-19 Survey:

- Consumer spending is falling and the report has been withheld due to its 'adverse' findings.

- There was a significant increase in the divergence in not only the levels in the consumption pattern but also the direction of the change when compared to the other administrative data sources like the actual production of goods and services.

Why is the survey not published?

- In view of the data quality issues, the Ministry has decided not to release the Consumer Expenditure Survey results of 2017-2018.

- Concerns were raised about the ability/sensitivity of the survey instrument to capture consumption of social services by households especially on health and education.
- The Advisory Committee on National Accounts Statistics has also separately recommended that for rebasing of the GDP series, 2017-18 is not an appropriate year to be used as the new base year.
- The MoSPI is separately examining the feasibility of conducting the next Consumer Expenditure Survey in 2020-2021 and 2021-22 after incorporating all data quality refinements in the survey process.
- The survey allegedly showed that the average amount spent by an Indian in a month fell 3.7% to Rs 1,446 in 2017-18 from Rs 1,501 in 2011-12.
- While consumer spending declined 8.8% in 2017-18 in India's villages, it rose 2% over six years in cities, it said.

17. Winter-grade Diesel

Why in News?

- The launch of a special winter-grade diesel, developed by Indian Oil Corporation (Indian Oil), for the high-altitude regions of Ladakh was recently held.

Winter-grade diesel:

- Motorists in high-altitude sectors like Ladakh, Kargil, Kaza and Keylong face the problem of freezing of diesel in their vehicles when winter temperatures drop to as low as -300
- Indian Oil has come up with an innovative solution to this problem by introducing a special winter-grade diesel with a low pour-point of -330
- This fuel does not lose its fluidity function even in extreme winter conditions.
- This will help reduce the hardships faced by the local people for transportation and mobility during the harsh winter months.
- It will further facilitate the local economy as well as tourism of the region.

18. ISA – Steel Conclave 2019

Why in News?

- The Indian Steel Association supported by the Ministry of Steel, Government of India is organising the Second Edition of "ISA – Steel Conclave 2019" in New Delhi in November 2019.

ISA – Steel Conclave:

- The Conclave would feature discussions between senior industry leaders, government and consultants on innovations and technology, role of steel in construction & design, steel exports, capital goods, environmental management and other cutting-edge issues.
- The Conclave is a platform for the entire steel ecosystem and the related sectors to gain valuable insights.

Indian Steel Industry:

- India was the world's 2nd largest producer of crude steel (106 MT) in the calendar year 2018. She is the largest producer of Direct Reduced Iron (DRI) or Sponge Iron in the world.
- India was the 3rd largest consumer of finished steel in 2018 in the world after China and the USA.
- The steel sector contributes around 2% of the country's GDP and employs around 25 lakhs persons in steel/allied sectors.
- She is also the 4th largest producer of iron ore in the world.
- India is the second-largest coal producer and importer, after China.
- 100 per cent FDI through the automatic route is allowed in the steel sector.

19. Prevention of Fraudulent Banking Practices

Why in News?

- The Ministry of Finance has taken a number of steps to eliminate fraudulent banking practices.

Highlights:

- The Government has issued a "Framework for timely detection, reporting, investigation, etc. relating to large value bank frauds" to Public Sector Banks (PSBs) for systemic and comprehensive checking of legacy stock of their non-performing assets (NPAs), which provides that:
- All accounts exceeding Rs. 50 crore, if classified as NPAs, be examined by banks from the angle of possible fraud, and a report placed before the bank's Committee for Review of NPAs on the findings of this investigation;
- Examination be initiated for wilful default immediately upon reporting fraud to RBI; and
- Report on the borrower be sought from the Central Economic Intelligence Bureau in case an account turns NPA.

Fugitive Economic Offenders Act, 2018 has been enacted to deter economic offenders from evading the process of Indian law by remaining outside the jurisdiction of Indian courts. Read more on the Fugitive Economic Offenders Act in CNA dated 6th Jan, 2019.

PSBs have been advised to obtain certified copy of the passport of the promoters/directors and other authorised signatories of companies availing loan facilities of more than Rs. 50 crore and, decide on publishing photographs of wilful defaulters, in terms of the instructions of RBI and as per their Board-approved policy and to strictly ensure rotational transfer of officials/employees. The heads of PSBs have also been empowered to issue requests for issue of Look Out Circulars. For enforcement of auditing standards and ensuring the quality of audits, the Government has established the National Financial Reporting Authority as an independent regulator. Instructions/advisories have been issued by Government to PSBs to decide on publishing photographs of wilful defaulters, in terms of RBI's instructions and as per their Board-approved policy, and to obtain certified copy of the passport of the promoters/directors and other authorised signatories of companies availing loan facilities of more than Rs. 50 crores.

20. Kimberley Process Certification Scheme

Why in News?

- The Plenary meeting of the Kimberley Process Certification Scheme (KPCS) is being hosted by India.

Highlights:

- India is the present Kimberley Process (KP) Chair.
- The plenary is being hosted in New Delhi in November 2019.
- India took over the chair of the KP in the previous plenary which was held in Belgium in 2018.
- Chair for 2019 – 20 is India and Vice Chair is Russia.
- India had earlier chaired KPCS in the year 2008.

Kimberly Process:

- The Kimberley Process (KP) is a commitment to remove conflict diamonds from the global supply chain. KP claims its participants actively prevent 99.8% of the worldwide trade.
- The KP is a multilateral trade regime established in 2003 with the goal of preventing the flow of conflict diamonds. It was established by the United Nations General Assembly (UNGA).

- The KP unites governments, civil society and the wider industry.
- The core of this regime is the Kimberley Process Certification Scheme (KPCS) under which States implement safeguards on shipments of rough diamonds and certify them as "conflict free".
- India is a founding member of the KPCS.
- **Under the terms of the KPCS participants must:**
- Satisfy 'minimum requirements' and establish national legislation, institutions and import/export controls.
- Commit to transparent practices and to the exchange of critical statistical data.
- ✓ Trade only with fellow members who also satisfy the fundamentals of the agreement.
- ✓ Certify shipments as conflict-free and provide the supporting certification.
- ✓ The idea behind these terms is to ensure that there is no market for conflict diamonds.
- There are 54 member countries in the KP which includes the European Union (EU) counted as one member.
- The KP is also described in UNSC resolutions.
- In accordance with the KP Core document, the work of the Kimberley Process is carried out through its seven Working Groups and Committees, which discuss issues on regular basis through teleconferences and exchange of mails, and meet twice in a year for in-person meeting at Intersessional and Plenary meetings organized by the Chair.
- The KPCS works on the principle of consensus and all the decisions are taken in the plenary session or through written procedure unanimously by all members.

Conflict Diamonds:

- The KP defines conflict diamonds as: 'rough diamonds used to finance wars against governments' – around the world.
- They are diamonds sold by rebel movements or illegal authorities to finance their conflicts and wars against legitimate governments.
- In 1998, certain rebel movements in Africa (Sierra Leone, Angola, D.R. of Congo, Liberia) were selling, among other things, illegally obtained diamonds (conflict diamonds) to fund their wars against legitimate governments.
- Many of these rebel movements use child soldiers in their wars/conflicts.

Diamond industry in India:

- Currently, India exports around USD 24 billion cut and polished diamonds.

- It is expected that India will reach an export target of USD 1 trillion in the coming years and the gem and jewellery sector, particularly cut and polished diamonds will contribute significantly to achieve this target.
- The importance of KPCS is immense to India as more than one million people are directly employed by the diamond industry.
- The Department of Commerce is the nodal Department and the Gem & Jewellery Export Promotion Council (GJEPC) is designated as the KPCS Importing and Exporting Authority in India.
- GJEPC is responsible for issuing KP Certificates and is also the custodian of KP Certificates received in the country.

21. India – Europe 29 Business Forum

Why in News?

- The India – Europe 29 Business Forum has been organized by the Ministry of External Affairs, Government of India and the Confederation of Indian Industry (CII) in New Delhi.

India – Europe 29 Business Forum:

- This is the fifth edition of the India-Europe 29 Business Forum (IE29BF).
- This is India's largest European industry platform.
- There would be sector-specific discussions and field visits, apart from B2B meetings, start-up connects and expositions.
- Participants are ministers from the central and state governments of India, diplomats, government representatives from E29 countries, leading industry representatives, entrepreneurs and the media.
- Focus sectors are artificial intelligence, smart cities, IT & ITES, renewable energy and pharmaceuticals.

Europe 29:

- The Europe 29 (E29) region refers to the 29 countries in Central, Eastern and Northern Europe.
- The Europe 29 region comprises Albania, Liechtenstein, Austria, Lithuania, Bosnia & Herzegovina, Macedonia, Bulgaria, Malta, Croatia, Moldova, Cyprus, Montenegro, Czech Republic, Norway, Denmark, Poland, Estonia, Romania, Finland, Serbia, Greece, Slovak Republic, Hungary, Slovenia, Iceland, Sweden, Latvia, Switzerland and Turkey.

22. Disinvestment of CPSEs

Why in News?

- Cabinet approves strategic disinvestment of CPSEs.
- The Cabinet Committee on Economic Affairs, chaired by the Prime Minister, has accorded 'In-principle' approval for strategic disinvestment in select central public sector enterprises (CPSEs).

Highlights:

- The resources unlocked by the strategic disinvestment of these CPSEs would be used to finance the social sector/developmental programmes of the Government benefiting the public.
- The unlocked resources would form part of the budget and the usage would come under the scrutiny of the public.
- It is expected that the strategic buyer/acquirer may bring in new management/technology/investment for the growth of these companies and may use innovative methods for their development.
- In 2015, the Government reinitiated the policy of strategic disinvestment in order to open up sectors for private enterprise to bring efficiency in management that would contribute to general economic development.
- Strategic Disinvestment is guided by the basic economic principle that the Government should discontinue its engagement in manufacturing/producing goods and services in sectors where the competitive markets have come of age, and such entities would most likely perform better in the private hands due to various factors e.g. technology up-gradation and efficient management practices; and would thus add to the GDP of the country.
- Currently, the cabinet approval for strategic disinvestment has been given for:
  - ✓ Bharat Petroleum Corporation Ltd. (BPCL)
  - ✓ Shipping Corporation of India Ltd. (SCI)
  - ✓ Container Corporation of India Ltd. (CONCOR)
  - ✓ Tehri Hydro Development Corporation India Limited (THDCIL)
  - ✓ North Eastern Electric Power Corporation Limited (NEEPCO)

23. Patent Prosecution Highway

Why in News?

- The Union Cabinet approved a proposal for Bilateral Patent Prosecution Highway (PPH) Programme between the Indian Patent Office under the Controller General of Patents, Design and Trade Marks (CGPDTM), Government of India with Patent Offices of other interested countries/regions.

Patent Prosecution Highway (PPH) Programme:

- The programme will initially commence between the Japan Patent Office and the Indian Patent Office on a pilot basis for a period of three years.
- Under this pilot programme, the Indian Patent Office may receive patent applications in certain specified technical fields only, like electrical, electronics, computer science, information technology, physics, civil, mechanical, textiles, automobiles and metallurgy.
- The Japan Patent Office may receive applications in all fields of technology.
- The PPH programme is a set of initiatives for providing accelerated patent prosecution procedures by sharing information between some patent offices.

Benefits of PPH:

- Reduction in disposal time and pendency of patent applications.
- Consistency in the quality of granted patents.
- Provides an opportunity for Indian inventors including MSMEs and Start-ups to get accelerated examination of their patent applications in Japan (initially, and later other countries).
- Faster grant of patents in India will result in more inbound investments by companies and also the introduction of newer technologies thereby giving a fillip to Make in India and increasing employment opportunities.

24. Rohtang Tunnel

Why in News?

- The Rohtang Tunnel will become the world's longest highway tunnel above 10,000 feet, after its inauguration in Sept 2020.

Rohtang Tunnel:

- Rohtang Tunnel is a highway tunnel being built under the Rohtang Pass in the eastern Pir Panjal range of the Himalayas on the Leh-Manali Highway.

- At 8.8 km length, the tunnel will be one of the longest road tunnels in India and is expected to reduce the distance between Manali and Keylong by about 46 km.
- For now, the tunnel provides a temporary winter link to the outside world not only to residents of Lahaul and Spiti but also to those living in Zanskar Valley of Ladakh.
- While Rohtang Pass is at a height of 13,050 feet, the pass on the road to Leh is Baralacha La at 16,040 feet.
- An alternate road link to Ladakh has also been developed by BRO on the Darcha-Padam-Nimu axis, but here again a 4.15-km long tunnel at Sinka La Pass (16,703 feet) would be required for all-weather access.

Significance:

- The project also has significant strategic implications for the military as it will allow access beyond Rohtang Pass even in peak winters.
- All-winter connectivity to Ladakh, however, is still some time away as more tunnels will have to be built to tackle the high passes which fall beyond Rohtang.

Why delay?

- It would have been completed at least four years earlier, but for a massive torrent of water encountered inside the tunnel. The Seri Nullah, which flows on top of the tunnel, almost threatened to derail the project and it took several years to devise ways to tackle the massive flow of water that often went up to 140 litres per second.

25. India one of the largest gold smuggling hubs in the world

Why in News?

- International non-government organisation IMPACT, in its latest report, has said that India has become one of the largest gold smuggling hubs in the world. It is headquartered in Canada.

Highlights:

- Gold possibly tied to conflict, human rights abuses and corruption in Africa and South America is entering legal international markets through India, said IMPACT, in a statement.
- Actors across India's gold industry are failing to do proper checks on where gold comes from to ensure it's not financing conflict and human rights violations.
- The report said that one-third of the world's gold passed through India, identifying three primary factors for smuggling: tax breaks, falsified origin documents and complicit allies.

- To boost India's refinery sector, the government had introduced tax breaks in 2013 for unrefined gold. According to the report, this led to traders covering up questionable provenance claims by falsifying documentation to take advantage of lower taxes. The import of unrefined gold shot from 23 tonnes in 2012 to over 229 tonnes in 2015.

- Analysis of trade data reveals more declared gold imports to India than some countries are capable of producing, such as in the Dominican Republic and Tanzania, as well as instances of paperwork fraud like in Ghana. In the case of the Dominican Republic, as much as 100.63 tonnes of gold doré [unrefined gold] imported to India between 2014 and 2017 cannot be accounted for in the country's gold production.

- The report said that refined gold was being smuggled into India primarily from the United Arab Emirates, while key traders and refiners in Africa's Great Lakes region with links to India were identified as being part of the illicit gold trade.

Way Forward:

- IMPACT recommended harmonising of taxes and enhanced regulatory controls with additional valid information for all imports to discourage smuggling.

- With India at the heart of a web of the illicit trade of gold, and threads spanning the globe and almost certainly financing conflict and corruption, it is said that the authorities must take action to remove incentives for gold smuggling and ensure the gold industry implements due diligence.

- IMPACT has also called on those associated with India's gold industry to implement due diligence on their gold supply chains.

26. Nationwide Artificial Insemination Programme (NAIP)

Why in News?

- The Nationwide Artificial Insemination Programme (N.A.I.P) which was recently launched by PM covering 600 chosen districts including aspirational districts as identified by NITI Aayog.

Nationwide Artificial Insemination Programme:

- The NAIP is a campaign mode genetic upgradation program covering all breeds of bovines to enhance the milk production using low cost breeding technology.

- It aims for improving genetic merit of milch animals with high quality seed.

- The gestation period for getting the benefits from the AI bovine is approximately 3 years.

- The aim of the program is to inseminate over 1 crore bovines in 6 months.

- The rate of Artificial Insemination is continuously increasing and has reached an average of 25,000 animals per day so far.
- 8 Lakh Artificial Inseminations has been performed under this programme benefitting more than 3.7 lakh farmers as on 29th November, 2019.

Pashu Aadhaar:

- The NAIP also aims to ear-tag them with 'PashuAadhaar' which is a unique identification provided to the animals.
- This will enable the Government to identify and track the animals uniquely with all details such as the breed, age, gender and owner details.
- Every cow and buffalo under AI will be tagged and can be tracked through the Information Network on Animal Productivity and Health (INAPH) Database.

5. GEOGRAPHY & ENVIRONMENT

1. No Relief for Delhi-NCR as Air Quality stays at severe level

Why in News?

- As Delhi chokes, the government has shut all schools till November 5 after a Supreme Court-mandated panel declared a public health emergency in Delhi-NCR.

Highlights:

- Air quality in the national capital saw a sharp dip after Diwali celebrations and has been deteriorating gradually as stubble burning continues in parts of Punjab and Haryana despite a ban.
- The blanket of haze over Delhi continues with the national capital's pollution levels around the 450-mark.
- The overall AQI in Delhi was 427.
- Pollution levels in the satellite towns of Ghaziabad (496), Greater Noida (496), and Noida (499) were much worse.

AQI (Air Quality Index):

- The AQI is an index for reporting daily air quality.
- The AQI focuses on health effects you may experience within a few hours or days after breathing polluted air.
- EPA (Environment Protection Agency) calculates the AQI for five major air pollutants regulated by the Clean Air Act:
  ✓ Ground-level ozone,
  ✓ Particle pollution (also known as particulate matter),
  ✓ Carbon monoxide,
  ✓ Sulphur dioxide, and
  ✓ Nitrogen dioxide.
- For each of these pollutants, EPA has established national air quality standards to protect public health.
- Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country.

2. Brown Blotched Bengal Tree Frog

Why in News?

- Recently, a new frog species, Polypedates bengalensis was discovered in a residential area in West Bengal. The discovery points to the vulnerability of little-known species in non-protected areas.

Brown Blotched Bengal Tree Frog:

- Brown Blotched Bengal Tree Frog or Polypedates bengalensis frog was found in two places in West Bengal – Badu, North 24 Parganas District and Khordanahala, South 24 Parganas District.
- Polypedates are found throughout South and Southeast Asia
- It belongs to the genus Polypedates. There are 25 other Polypedates species round the world. Polypedates bengalensis is the 26th.
- The frog's body colour is yellowish-brown to greenish-brown.

3. Danakil Depression

Why in News?

- Microbes are known to survive almost anywhere. Scientists now believe that Danakil depression in Ethiopia is an exception.
- New research has pointed out that bubbling pools of water and mounds of salt covering its landscape — that is too daunting even for these Microorganisms.

Danakil Depression:

- The Danakil Depression in northeastern Ethiopia is one of the world's hottest places, as well as one of its lowest, at 100 metres below sea level.
- At the northern end of the Great Rift Valley, and separated by live volcanoes from the Red Sea, the plain was formed by the evaporation of an inland water body.
- All the water entering Danakil evaporates, and no streams flow out from its extreme environment. It is covered with more than 10 lakh tonnes of salt.
- Now, a new study says that active and naturally occurring life cannot be sustained at Danakil.
- It identifies two barriers: magnesium-dominated brines that cause cells to break down; and an environment having simultaneously very low pH and high salt, a combination that makes adaptation highly difficult.

4. Cyclone 'Bulbul'

Why in News?

- The Principal Secretary to PM holds a high-level meeting on Cyclone 'Bulbul' with the States of Odisha, West Bengal and Andaman and Nicobar Islands.

Highlights:

- Coastal Odisha is likely to witness wind speed of 70-80 kmph gusting up to 90 kmph accompanied by heavy to very heavy rain.
- Similar situation is likely to prevail in coastal West Bengal.
- Further sea conditions will be very rough and it is advised by the India Meteorological Department (IMD) that fishing operations are to be completely suspended.

Cyclone Bulbul:

- The cyclone is steadily gathering intensity over the Bay of Bengal and is expected to turn into a very severe cyclonic storm.
- It is unclear as of now whether the cyclone will make landfall in India. It might skirt Odisha and head towards West Bengal and Bangladesh.
- It is expected to bring rainfall over the Andaman and Nicobar Islands, north coastal Odisha and coastal West Bengal.
- Bulbul may also cause damage to thatched houses, partial damage to communication and power lines, major damage to coastal crops and uprooting of trees.
- Cyclone Bulbul is the seventh named storm of the unusually active 2019 North Indian Ocean cyclone season. The season has seen Cyclone Pabuk (South China Sea-Andaman Sea), Cyclone Fani (Bay of Bengal), Cyclone Vayu (Arabian Sea), Cyclone Hikka (Arabian Sea), Cyclone Kyarr (Arabian Sea) and Cyclone Maha (Arabian Sea).
- Bulbul was named by Pakistan.
- Cyclone Bulbul comes around seven months after Cyclone Fani struck Odisha. Cyclone Fani was the strongest storm to hit the state since the devastating 1999 Super Cyclone that killed thousands of people.

5. Odd-Even Rule in Delhi 2019

Why in News?

- The odd-even scheme was launched by the Delhi Government on November 4 to combat the hazardous smog that has enveloped the National Capital.

- The scheme has been launched for 12 days from November 4-15, 2019.

Highlights:

- The first day of the odd-even rule reportedly resulted in a major dip in the air pollution levels in Delhi.

- The Central Pollution Control Board (CPCB) data showed that the odd-even scheme teamed up with high wind speed brought down the air pollution in Delhi by almost 82 percent. Both PM10 and PM2.5 levels fell drastically by 6 pm on November 4.

- Under the odd-even rule, only vehicles with odd last digit registration numbers will ply on the roads on odd days and vehicles with even last digit registration numbers will be allowed on the roads on the even days.

- The odd-even scheme will not be applicable on November 11 and November 12 to commemorate the 550th birth anniversary of Guru Nanak Dev.

- The odd-even scheme has been implemented in Delhi to fight air pollution after a gap of almost three years.

- The National Capital has been reeling with 'severe plus' air quality level since the past few days.

Exemptions:

- The odd-even rule will not apply for two-wheelers, women drivers alone or with a child under the age of 12 years.

- The private vehicles transporting school children in uniform during school time and vehicles of persons with physical disabilities will also be exempted from the odd-even rule.

- The odd-even exemption list also includes the vehicles of VVIPs/VIPs- the President, Vice President, Prime Minister, Chief Justice of India, Lok Sabha Speaker, State Governors, Union Ministers, Opposition Leaders in Lok Sabha and Rajya Sabha, Chief Ministers of states and UTS and Supreme Court Judges.

6. Very Severe Cyclonic Storm 'Bulbul'

Why in News?

- A meeting of the National Crisis Management Committee (NCMC), chaired by the Cabinet Secretary, was held to review the preparedness to deal with severe cyclone 'Bulbul' over the Bay of Bengal that is likely to affect coastal districts of West Bengal and Odisha.

Highlights:

- Cyclone Bulbul is the seventh named storm of the unusually active 2019 North Indian Ocean cyclone season.
- The season has seen Cyclone Pabuk (South China Sea-Andaman Sea), Cyclone Fani (Bay of Bengal), Cyclone Vayu (Arabian Sea), Cyclone Hikka (Arabian Sea), Cyclone Kyarr (Arabian Sea) and Cyclone Maha (Arabian Sea).
- Bulbul was named by Pakistan.
- Cyclone Bulbul comes around seven months after Cyclone Fani struck Odisha. Cyclone Fani was the strongest storm to hit the state since the devastating 1999 Super Cyclone that killed thousands of people.

National Disaster Response Force:

- The National Disaster Response Force or the NDRF is a specialized paramilitary force formed under the Disaster Management Act of 2005 with the objective of having a specialized response to an impending disaster situation or disaster.
- Its purpose is to direct and implement a specialized response to both man-made and natural disasters.
- It was constituted in 2006 and is headed by a Director-General, who is a senior IPS officer.
- The NDRF operates on the basis of 'proactive availability' and 'pre-positioning' to the states.
- Its parent ministry is the Ministry of Home Affairs.

National Crisis Management Committee:

- A Standing National Crisis Management Committee, called the National Crisis Management Committee (NCMC) was set up by the Government of India with Cabinet Secretary as Chairman for effective implementation of relief measures in the wake of natural calamities.
- At the national level, Cabinet Committee on Security (CCS) and National Crisis Management Committee (NCMC) are the key committees involved in the top-level decision-making wrt Disaster Management (DM).
- It oversees the Command, Control and Coordination of the disaster response and gives direction to the Crisis Management Group (CMG) as deemed necessary.

7. Swachh – Nirmal Tat Abhiyaan

Why in News?

- A week-long intensive Beach Cleaning Drive in 50 identified beaches of India begins.

Swachh – Nirmal Tat Abhiyaan:

- The programme was launched by the Ministry of Environment, Forest and Climate Change to strive to make Indian beaches clean and create awareness amongst citizens about the importance of coastal ecosystems.

- The identified beaches are in 10 coastal States/Union Territories (UTs) namely Gujarat, Daman & Diu, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Puducherry, Andhra Pradesh, and Odisha.

- The beaches have been identified after consultation with the states/UTs.

- The cleaning drives in all beaches are being undertaken, involving school/college students of eco-clubs, district administration, institutions, volunteers, local communities and other stakeholders. State Nodal Agencies for the eco-clubs will be facilitating the week-long intensive cleanliness drive in all 10 States/UTs.

- Environment Education Division of the Ministry of Environment and Society of Integrated Coastal Management (SICOM) under the aegis of the Ministry of Environment will be responsible for the overall coordination for the drive.

- On completion of the drive, the best three beaches will be suitably awarded.

8. Species in news: Pliosaur

Pliosaurs:

- Over 150 million years ago, enormous reptiles swam the Jurassic oceans.

- The largest aquatic carnivorous reptiles that have ever lived, they are often dubbed "sea monsters".

- Scientifically, they are placed in the suborder Pliosauroidea, whose members are called pliosaurs.

- Interest in these giants has been revived with the recent discovery of their bones in a cornfield in the Polish village of Krzyzanowice. Remains of pliosaurs are rare in Europe.

- They measured over 10 metres in length and could weigh up to several dozen tons.

- They had powerful, large skulls and massive jaws with large, sharp teeth.

- Their limbs were in the form of fins.

Swietokrzyskie Mountains:

- The Swietokrzyskie Mountains are a mountain range in central Poland.
- In the Jurassic era, the Swietokrzyskie Mountains area is believed to have been an archipelago of islands, where there were warm lagoons and shallow sea reservoirs, home to the marine reptiles discovered by the palaeontologists.
- The locality where the remains were discovered is considered to be rich in the fossils of coastal reptiles. Researchers now hope to find more remains in the coming months.

9. Acqua alta

Why in News?

- High tides in the Adriatic Sea have caused floods in the historic city of Venice.

Acqua alta:

- Venice is situated on the coast of northeastern Italy, bounded by the Adriatic Sea Acqua alta is the name given to exceptionally high tides in the Adriatic Sea.
- Water levels this week has reached heights of 1.87 metres (well over 6 feet) — only a little short of the 1.91-metre record that was set during the "great flood" of 1966.
- The city's Saint Mark's Square went under more than a metre of water, whereas the adjacent Saint Mark's Basilica was flooded for only the sixth time in the last 1,200 years and for the fourth time in the last 20 years.
- Late autumn and winter are the seasons for high tides or acqua alta in Venice.
- At the end of October last year, over 75% of the lagoon city went underwater after high tides and stormy weather led to an increase in the water levels of the canals.

10. Satellites to Assess Pollution Status

Why in News?

- ISRO satellites INSAT-3D & 3DR is assessing the pollution status over the country.

Highlights:

- The Imager payload on-board ISRO's INSAT-3D & 3DR satellites is used to monitor the Aerosol Optical Depth (AOD).
- The AOD is a measure of the extinction of the solar beam by dust and haze.
- In other words, particles in the atmosphere (dust, smoke, pollution) can block sunlight by absorbing or by scattering light.

- AOD tells us how much direct sunlight is prevented from reaching the ground by these aerosol particles.

- It is a dimensionless number that is related to the amount of aerosol in the vertical column of atmosphere over the observation location.

- A value of 0.01 corresponds to an extremely clean atmosphere, and a value of 0.4 would correspond to a very hazy condition.

- It is found that AOD, PM2.5 and PM10 concentrations are higher over the Indo-Gangetic Plains covering parts of Delhi, Uttar Pradesh and Bihar during October and November.

- High concentration of these pollutants is seen originating from parts of Punjab and Haryana during stubble burning.

- Climatological study of satellite-based fire occurrences and associated pollutant parameters reveal that fire occurrences increased by 4% over Punjab and Haryana region during October-November between 2003 and 2017.

- The model-based analysis suggests that there is a high probability of transportation of smoke aerosols from Punjab & Haryana, towards down-wind regions of Delhi, Uttar Pradesh and Bihar.

- Using medium resolution Indian Remote Sensing (IRS) satellite data, stubble burned area maps are generated at the end of stubble burning activity in the Kharif season.

- ISRO has been carrying out monitoring of stubble burning since 2015.

11. UN Climate Change Conference

Why in News?

- Cabinet approves India's Approach to the UN Climate Change Conference to be held in Spain next week.

Highlights:

- The Cabinet has approved India's negotiating stand at the 25th Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) scheduled to be held in Madrid, Spain in the first and second weeks of December 2019.

- The COP is being held under the presidency of Chile.

- The Indian delegation is led by the Union Minister for Environment, Forest and Climate Change.

- COP 25 is an important conference as countries prepare to move from the pre-2020 period under the Kyoto Protocol to the post-2020 period under the Paris Agreement.

- India's approach will be guided by principles and provisions of the UNFCCC and Paris Agreement particularly the principles of Equity and Common but Differentiated Responsibilities and Respective Capability (CBDR-RC).
- Equity and Common but Differentiated Responsibilities and Respective Capability (CBDR-RC):
- It is a principle within the UNFCCC that acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change.
- CBDR-RC has served as a guiding principle as well as a source of contention in the UN climate negotiations.
- Reflecting CBDR-RC, the Convention divided countries into "Annex I" and "non-Annex I," the former generally referring to developed countries and the latter to developing countries.
- Under the Convention, Annex I countries have a greater mitigation role than non-Annex-I countries.

India's Role:

- In the Climate Action Summit convened by United Nations Secretary-General, the Prime Minister announced India's plan on scaling up of renewable energy target to 450 GW.
- He also called for responsible action by all on the principles of equity and CBDR-RC.
- India has been leading the world in its pursuit of enhanced solar energy capacity through International Solar Alliance (ISA).
- India has also launched the Coalition for Disaster Resilient Infrastructure, which will serve as a platform to generate and exchange knowledge on different aspects of climate and disaster-resilient infrastructure.
- Apart from this, India has launched along with Sweden, the 'Leadership Group for Industry Transition' which will provide a platform for government and the private sector in different countries to work together on accelerating low carbon growth and cooperation in the area of Technology Innovation.

12. Loktak Inland Waterways Project

Why in News?

- The Ministry of Shipping gave approval for the development of Loktak Inland Water ways improvement project in Manipur under the central sector scheme.

Loktak Lake:

- It is the largest fresh water lake in North east located at Moirang in Manipur.
- This lake is known for its circular floating swamps (called phumdis in the local language)
- The term phumdis refers to a collection of heterogeneous mass of vegetation, soil, and organic matter at various stages of decomposition
- Sangai is the state animal of Manipur. Its hooves are adapted to walk on the phumdis
- The lake is now endangered, with innumerable threats like pollution, decline in diversity of avifauna and thinning of phumdis
- The team will enumerate the steps required to be initiated for declaring Loktak Lake as a UNESCO World Heritage Site.

13. Common but Differentiated Responsibilities and Respective Capability (CBDR-RC)

Why in News?

- India will insist upon the principle of 'equity and common but differentiated responsibilities' at next week's COP-25 in Madrid, Spain.

CBDR-RC:

- It is a principle within the UNFCCC that acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change.
- In simpler terms, it means that while all countries should do their best to fight global warming, developed countries – with deeper pockets, which were primarily responsible for the climate mess – should take a bigger share of the burden than the developing and Under-Developed Countries.

India's Agenda at COP-25:

- India will stress upon the need for fulfilling pre-2020 commitments by developed countries.
- The 'pre-2020 period commitments' refers to the promises made by the developed countries under the Kyoto Protocol — developing countries faced no binding commitments under the protocol.

Paris Agreement (COP-21):

- The Paris Agreement that was signed by all countries (and since ratified by the required number of countries) was hammered out in the 21st COP, in 2015.

- In that agreement, all countries agreed upon a common target of "2 degrees Celsius" – they resolved not to allow the world to warm more than 2 degrees over the average temperatures that existed in the pre-industrialisation period of the mid-19th century.

- To limit global warming to not more than 2 degrees, all countries brought in their own action plans — NDCs — and pledged to walk the talk. They also agreed that the developed countries should mobilise funds for the developing countries to undertake climate-action projects — but neither any quantum of funds nor the nature of such funds was specified. In general, it was agreed that the developed countries would provide technology and that all countries would sit for a review of the status once in five years – called 'global stocktake' – and would "raise ambition".

14. UNDP Accelerator Lab

Why in News?

- The UNDP Accelerator Lab India project was recently launched in collaboration with the government's Atal Innovation Mission.

Accelerator Lab:

- It seeks to address some of the most pressing issues facing India, including air pollution, through innovation. The laboratory will be housed in the UNDP India office has partnered with the Indian government's Atal Innovation Mission to achieve its objectives. Other issues that the laboratory will seek to address include sustainable water management and client-resilient livelihood. The vision is to make faster progress in meeting the ambitious Sustainable Development Goals (SDGs) of the U.N. by 2030.

15. Production of CNG from Stubble

Why in News?

- As part of the SATAT scheme, several PSUs Including Indian Oil Corporation Limited, Bharat Petroleum Corporation Limited had launched an Expression of Interest (EOI) for procurement of CBG from the entrepreneurs at an assured price.

Sustainable Alternative Towards Affordable Transportation (SATAT):

- Launched 2018, SATAT is aimed at promoting Compressed Bio-Gas (CBG) as an alternative, green transport fuel for efficient management of biomass and organic waste.

- Similar to LNG, the CBG produced under SDATAT can be sold to automobiles as clean fuel, and to domestic, industrial and commercial consumers which are using LPG and other fuels.

Bio-gas:

- Bio-gas is produced naturally through a process of anaerobic decomposition from waste/ bio-mass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc.

- After purification, it is compressed and called CBG, which has pure methane content of over 95%.

- Compressed Bio-Gas is exactly similar to the commercially available natural gas in its composition and energy potential.

- With calorific value (~52,000 KJ/kg) and other properties similar to CNG, Compressed Bio-Gas can be used as an alternative, renewable automotive fuel.

Benefits of CBG on a Commercial Scale:

- ✓ Responsible waste management, reduction in carbon emissions and pollution
- ✓ Additional revenue source for farmers
- ✓ Boost to entrepreneurship, rural economy and employment
- ✓ Support to national commitments in achieving climate change goals
- ✓ Reduction in import of natural gas and crude oil
- ✓ Buffer against crude oil/gas price fluctuations

GOBAR-DHAN-Scheme:

- The Government of India had launched the GOBAR-DHAN (Galvanising Organic Bio-Agro Resources) scheme in 2018 to convert cattle dung and solid waste in farms to CBG and compost.

- It is funded under Solid and Liquid Waste Management (SLWM) component of Swachh Bharat Mission-Gramin (SBM-G) to benefit households in identified villages. The scheme proposes to cover 700 projects across India in 2018-19.

Way Forward:

- Compressed Bio-Gas networks can be integrated with city gas distribution (CGD) networks to boost supplies to domestic and retail users in existing and upcoming markets. Besides retailing from OMC (oil marketing company) fuel stations, Compressed Bio-Gas can at a later date be injected into CGD pipelines too for efficient distribution and optimised access of a cleaner and more Affordable Fuel.

16. New U.N. climate report offers 'bleak' emissions forecast

Why in News?

- The 10th Emissions Gap Report by the United Nations Environment Programme (UNEP) warned that there's "no sign" greenhouse gases will hit their zenith Anytime Soon.
- India-is-the-fourth-largest-emitter-of-greenhouse-gases.

Emissions Gap:

- The Emissions Gap, also called Commitment Gap, measures the gap between what is need to be done and what is actually been done to tackle climate change.
- The gap is the difference between the low level of emissions that the world needs to drop to, compared with the projected level of emissions based on countries' current commitments to decarbonization.
- Emissions-Gap-Report-by-UNEP-2019:
- The world's emissions have been increasing by about 5% per year for the past decade. That would lead to temperature increases of nearly 4°C by 2100.
- Emissions levels reached 55 GtCO2 in 2018. By 2030, it will rise to double the volumes consistent with limiting temperature increases to 1.5°C.
- To stop temperatures from rising more than 1.5°C, the world needs to cut greenhouse gas emissions by 32 GtCO2e by 2030.
- Efforts to reduce CO2 emissions would have to increase five-fold to reach the 1.5 degrees C target.
- China's per capita emissions are rising to levels experienced by developed economies. China is still the world's largest single source of greenhouse gas emissions, with annual emissions now almost double of US, the second greatest source.
- The rankings would change if land-use change emissions were included, with Brazil likely to be the largest emitter.

Suggestions:

- The report names five key areas for Closing Emission Gap:
- ✓ At least $1.59 billion annual investment in renewables and more efficient energy use
- ✓ Coal phaseout
- ✓ Decarbonization of transport
- ✓ Decarbonization of industry
- ✓ Increased access to electricity for 3.5 billion people

- Some environmental economists have called for a tax on CO2 emissions to incentivize companies to produce energy more sustainably. However, it was unsuccessful.
- One strategy for closing the emissions gap would see renewable sources make up 85% of the world's electricity mix by 2050.
- The number of countries and cities setting goals to go carbon-neutral has risen since September 2018 from just a handful to about 65. The European Union, for example, aims to be carbon neutral by 2050. Individual countries including Germany, the UK and France have also set zero-emissions goals.

Suggestions for India:

- Plan the transition from coal-fired power plants
- Develop an economy-wide green industrialization strategy towards zero-emission technologies **Expand mass public transit systems**
- Develop domestic electric vehicle targets working towards 100 per cent new sales of zero-emission cars

Emissions Gap Report:

- It is annually published by United Nations Environment Programme (UNEP). It examines the progress of countries to close the gap via their commitments to emissions reduction.

The Report measures three key trend lines:

- The amount of greenhouse gas emissions every year up to 2030
- The commitments countries are making to reduce their emissions and the impact these commitments are likely to have on overall emission reduction
- The pace at which emissions must be reduced to reach an emission low that would limit temperature increase to 1.5 C, affordably
- The top four emitters (China, USA, EU and India) contribute to over 55% of the total emissions over the last decade. India's global emissions was 5.5% in 2018.
- G20 nations collectively account for 78 % of all emissions. Emissions per capita of India is one of the lowest within the G20.

17. Clownfish

Why in News?

- The clownfish, made so popular by the animated film Finding Nemo and its sequel Finding Dory, cannot be expected to be able to adapt to a rapidly changing environment, a new study has concluded.
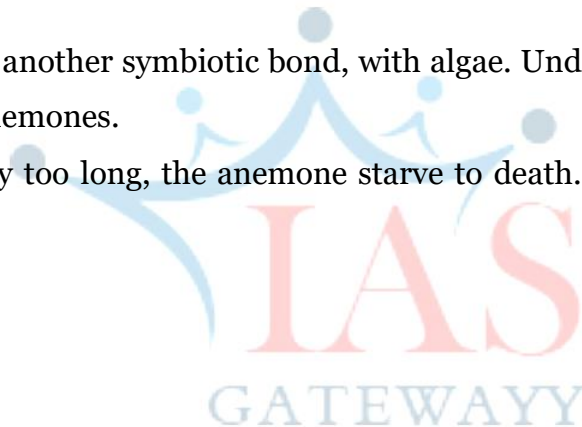
Clownfish:

- Clownfish are found in various parts of the Indian and Pacific Oceans, including the Great Barrier Reef.
- They typically live at the bottom of shallow seas in sheltered reefs or in shallow lagoons. It is this habitat that is under threat.

Habitat Under Threat:

- Clownfish breed only in sea anemones, sharing a symbiotic bond.
- Clownfish shelter in the anemone and are the only fish that do not get stung by the nematocysts of the anemone.
- The anemone benefits because clownfish can defend the anemone from fish that might eat it. They never live anywhere but in the anemone.
- Like coral reefs in general, Anemones are under direct threat from the impacts of climate change.
- The anemones share another symbiotic bond, with algae. Under stress in warming waters, the algae leave the anemones.
- If the algae stay away too long, the anemone starve to death. Which leaves the clownfish without a home.

6. INTERNATIONAL RELATIONS

1. SCOJTEX-2019

Why in News?

- Union Minister of Home Affairs will inaugurate the Shanghai Cooperation Organization Joint Exercise on Urban Earthquake Search & Rescue (SCOJtEx-2019).

SCO Urban Earthquake Search & Rescue Exercise (SCOJtEx.) 2019:

- The National Disaster Response Force (NDRF) is hosting the exercise.
- The main aim to rehearse the disaster response mechanism, share knowledge, experience, technology & also for mutual coordination, etc.
- This exercise shall also provide an opportunity to enhance the coordination & co-operation involving multi-agency operations in an earthquake scenario.
- The participants of all 08 member countries namely China, India, Kazakhastan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan shall be participating in this exercise.
- The four-day long simulation exercise shall be conducted as per the International Search & Rescue Advisory Group (INSARAG) methodology & guidelines.
- There will be a Joint Urban Earthquake Search & Rescue Exercise for Shanghai Cooperation Organization member states followed by the Shanghai Cooperation Organization experts meeting of Ministries responsible for Prevention and Elimination of Emergency Situation.
- The main focus of Shanghai Cooperation Organization Joint Exercise on Urban Earthquake Search & Rescue (SCOJtEx-2019) shall be to test the region's preparedness and resilience towards effective activation of Inter- governmental interaction for immediate response.

INSARAG:

- The International Search and Rescue Advisory Group (INSARAG) was established in 1991.
- This establishment followed the initiatives of the specialised international Urban Search and Rescue (USAR) teams who operated together in the Mexican earthquake of 1985 and the Armenian earthquake of 1988.
- The INSARAG's primary purpose is to facilitate coordination between the various international USAR teams who make themselves available for deployment to countries experiencing devastating events of structural collapse due primarily to earthquakes.

- The group achieves such coordination through facilitating opportunities for communication between these groups ahead of such events.
- These meetings of teams have resulted in many practical agreements between them that have streamlined working together during actual disasters.

2. BIMSTEC Ports' Conclave

Why in News?

- The Minister of State for Shipping, will inaugurate the first ever 'BIMSTEC Ports' Conclave at Visakhapatnam in Andhra Pradesh.

Objectives:

- To discuss a mechanism to encourage tourism in the region and develop industrial clusters in close proximity to a Port.
- To discuss the emerging threats and the safeguards against security threats, as ports are not only of vital commercial interest but also a nation's strategic assets.

Highlights:

- The Ports' First Conclave of BIMSTEC nations is expected to explore the possibility of increasing economic cooperation by furthering EXIM trade and coastal shipping.
- The Conclave will also discuss various investment opportunities, best practices adopted for productivity and safety at Ports.
- Senior officials from the Ports Sector from all seven nations as well as from the Trade and various Shipping Associations will be participating in the conclave.
- The diverse historical and cultural heritage of the BIMSTEC nations make them ideal destinations for tourism.
- The ports play a vital role in encouraging cruise tourism.
- The conclave will provide a platform for discussion on various steps undertaken for improving the ease of doing business also discuss the process, the technologies and solutions available to adopt 'Green Port Operations'.

3. Feni River

- The Union Cabinet has given its approval for the MoU between India and Bangladesh on withdrawal of 1.82 cusec of water from Feni River by India for drinking water supply scheme for Sabroom town Tripura.

Feni River:

- Feni River is a river in southeastern Bangladesh.

- It is a trans-boundary river with an ongoing dispute about water rights.

- The Feni River originates in South Tripura district and flows through Sabroom town and then enters Bangladesh.

- Muhuri River, also called Little Feni, from Noakhali District joins it near its mouth.

- The river is navigable by small boats as far as Ramgarh, about 80 kilometres (50 mi) upstream.

Why such Agreement?

- The question of sharing of the waters of the river between India and Pakistan was first discussed in 1958.

- As on date, there is no water-sharing agreement on Feni River between India and Bangladesh.

- The present supply of drinking water to Sabroom town is inadequate. The ground water in this region has high iron content.

- Implementation of this scheme would benefit over 7000 population of Sabroom town.

4. Kartarpur Corridor

Why in News?

- The Prime Minister of India will inaugurate the Integrated Check Post at Kartarpur Corridor.

Highlights:

- India and Pakistan have signed an agreement to operationalise the Kartarpur corridor that will facilitate pilgrims from India to visit the Gurdwara Kartarpur Sahib in Pakistan.

- The Highlights of the Agreement are:
    - ✓ Indian pilgrims of all faiths and persons of Indian origin can use the corridor;
    - ✓ The travel will be Visa Free;
    - ✓ Pilgrims need to carry only a valid passport;
    - ✓ Persons of Indian Origin need to carry OCI card along with the passport of their country;
    - ✓ The Corridor is open from dawn to dusk. Pilgrims travelling in the morning will have to return on the same day;

- ✓ The Corridor will be operational throughout the year;
- ✓ Pilgrims will have a choice to visit as individuals or in groups, and also to travel on foot;
- ✓ India will send the list of pilgrims to Pakistan 10 days ahead of travel date. Confirmation will be sent to pilgrims 4 days before the travel date.

5. India-ASEAN Business Summit

Why in News?

- Union Minister addressed the inaugural session of the India-ASEAN Business Summit.
- The minister mentioned in his speech the Bamboo Industrial Park coming up at Dima Hasao district in Assam.

Bamboo Industrial Park:

- This is India's first Bamboo Industrial Park.
- The project is expected to be completed by March 2021.

National Bamboo Mission:

- National Bamboo Mission is a Centrally Sponsored Scheme started in the year 2006-07.
- The scheme was later subsumed under the Mission for Integrated Development of Horticulture (MIDH) for the years 2014-15 and 2015-16.
- The scheme aims at promoting the growth of Bamboo sector through the area based regionally differentiated strategy.

India-ASEAN Business Summit:

- The theme for the Summit is 'Today, Tomorrow, Together'.
- It is being organised to strengthen trade and investment flows with ASEAN
- The objective of the conference is to enhance the trade trajectory between India and ASEAN nations to new highs.
- Senior government officials from India and the ASEAN nations are interacting with the business community of India and ASEAN for the promotion of bilateral trade and investments. Sessions being held are focussed on sectors such as infrastructure, tourism, e-commerce, IT/ITES, fintech, education, skill development, healthcare and pharmaceuticals, food processing and agriculture.
- There will also be a special session on Focus Vietnam – Growing Trade & Commerce between India & Vietnam.

- More than 60 delegates from 10 ASEAN countries and more than 200 delegates from India are participating in the summit.

6. India-Finland Joint Commission

Why in News?

- 19th Session of the India-Finland Joint Commission concludes.

India-Finland Joint Commission:

- The India-Finland Joint Commission was set up in 1974.
- The Agenda for the 19th Joint Commission Session was:
  - ✓ WTO issues
  - ✓ India – EU BTIA
  - ✓ Bilateral trade and investment relations
  - ✓ Trade barrier issues and measures to promote trade
  - ✓ Cooperation in the sectors of power, petroleum and gas, new and renewable energy, environment, cleantech, science, technology and innovations, education and skill development, and labour mobility, digitalization including ICT, transportation
  - ✓ Cooperation in the textiles sector
  - ✓ Cultural cooperation
  - ✓ Tourism cooperation
- The Joint Commission is a forum for strengthening economic relations between India and Finland.
- The 20th session will be held in Helsinki in 2021.

India – Finland Relations:

- This year marks the 70th anniversary of India – Finland diplomatic relations.
- Both India and Finland cooperate on a wide array of issues and as a member of the European Union (EU), Finland regards India as a strategic partner for balanced and comprehensive trade relations.
- Bilateral trade between India and Finland totalled USD 1.247 billion in 2014-15 and USD 1.284 billion in 2016-17.
- In 2016 Finnish companies have invested USD 419 million between April 2000 and July 2017.
- Approximately 100 Finnish companies have operations in India and about 30 Indian companies mainly in the software and consultancy sector are active in Finland.

- **Main export items from India:** Electronic goods, mineral fuels and mineral oils, readymade garments, cotton including accessories, pharmaceuticals & fine chemicals, articles of iron and steel, machinery and instrument, coffee, rubber, iron and steel, organic chemicals and nuclear reactors, boilers, machinery and mechanical appliances and parts thereof.

- **Major imports of India from Finland:** Electrical machinery and equipment, nuclear reactors, boilers, machinery and mechanical appliances, paper and paper board, iron and steel, pulp of wood or of other fibrous cellulosic material, pulp and waste paper, vehicles and transport equipment, etc.

7. First India-Japan 2+2 Foreign and Defence Ministerial Meeting

Why in News?

- Defence Minister of India and External Affairs Minister of India met Foreign Affairs Minister and Minister of Defence of Japan in New Delhi for the first India-Japan 2+2 Foreign and Defence Ministerial Meeting.

Highlights:

- The Ministers affirmed that this dialogue will further enhance the strategic depth of bilateral security and defence cooperation.

- The Ministers noted with satisfaction that since last year India and Japan have initiated bilateral exercises between all three components of their defence forces.

- The Ministers also concurred to proceed with coordination for the first India-Japan joint fighter aircraft exercise in Japan.

- The Ministers welcomed the significant progress made in the negotiations of Acquisition and Cross-Servicing Agreement (ACSA) since the announcement to commence the negotiations in October 2018.

- Acquisition and cross-servicing agreement (ACSA), will allow the Indian military and the Japan Self Defense Force (JSDF) to use each other's bases for logistical support.

- It will enhance the strategic depth of bilateral security and defence cooperation.

- The ACSA would permit the Indian Navy (IN) access to a Japanese base in Djibouti, while the Japan Maritime Self Defense Force (JMSDF) would be permitted to use India's military installations on the Andaman and Nicobar Islands located in the Indian Ocean, which lie near the Malacca Straits, next to other naval facilities.

- Acknowledging the importance of ensuring maritime safety in achieving a free, open, inclusive and rules-based Indo-Pacific, the Ministers expressed their intention to further promote cooperation in the field of capacity building in maritime security and Maritime Domain Awareness including through cooperation with other countries.

- Recalling the Japan-India-US Summit Meetings in 2018 and 2019, the Ministers acknowledged the trilateral cooperation with the US.

- The Ministers expressed their satisfaction at trilateral cooperation represented by the "MALABAR 2019", mine-countermeasures exercise (MINEX) and "Cope India 2018" in which Japan participated as an observer in 2018.

- The Ministers had a frank and fruitful exchange of views on the regional issues of mutual interests particularly on the security situation in the Indo-Pacific.

7. INTERNAL SECURITY & DISASTER MANAGEMENT

1. Spyware Pegasus

Why in News?

- The popular messaging platform WhatsApp was used to spy on journalists and human rights activists in India earlier this year.
- The surveillance was carried out using a spyware tool called Pegasus, which has been developed by an Israeli firm, the NSO Group.
- WhatsApp sued the NSO Group in a federal court in US accusing it of using WhatsApp servers in the United States and elsewhere to send malware to approximately 1,400 mobile phones and devices.

Pegasus:

- All spyware do what the name suggests — they spy on people through their phones.
- Pegasus works by sending an exploit link, and if the target user clicks on the link, the malware or the code that allows the surveillance is installed on the user's phone.
- A presumably newer version of the malware does not even require a target user to click a link. Once Pegasus is installed, the attacker has complete access to the target user's phone.
- The first reports on Pegasus's spyware operations emerged in 2016, when Ahmed Mansoor, a human rights activist in the UAE, was targeted with an SMS link on his iPhone 6.

Method of working:

- A Pegasus operator must convince a target to click on a specially crafted 'exploit link' which allows the operator to penetrate security features on the phone.
- This automatically installs Pegasus without the user's knowledge or permission.
- Once the phone is exploited and Pegasus installed, it begins contacting the operator's command and control and send back the target's private data, including passwords, contact lists, events, text messages, and live voice calls from popular mobile messaging apps.
- The operator can even turn on the phone's camera and microphone to capture activity in the phone's vicinity.

2. 'WhatsApp did not Inform Govt. of System Breach'

Why in News?

- WhatsApp has stated that some Indian users of WhatsApp came under surveillance using an Israeli spyware.

Highlights:

- WhatsApp in October 2019 sued the NSO Group, an Israeli surveillance firm and developers of Pegasus, which is reportedly behind the technology that helped unnamed entities hack into roughly 1,400 devices across at least 20 countries, including India, Bahrain, Mexico and UAE. Indian users were among those impacted by the spyware.

- The NSO Group is an Israeli technology firm, which claims on its website that its products are used "exclusively" by government intelligence and law enforcement agencies "to fight crime and terror".

Concerns:

- WhatsApp has over 1.5 billion users globally, of which India alone accounts for about 400 million. The vulnerability of the users to such spying is of grave concern with regard to breach of their privacy.

- Government has stated that WhatsApp failed to inform the government of a breach of its system despite being legally bound to do so under Section 70(B) of the IT Act. They are legally bound to inform (computer emergency response team) CERT or any other relevant government agencies about the details of such attacks on Indian citizens.

- Despite WhatsApp arguing that they had given information to CERT-IN, the government has stated that it was a communication in pure technical jargon without any mention of Pegasus or the extent of breach.

- Thus, the information shared was only about a technical vulnerability but nothing on the fact that privacy of Indian users had been compromised. Lack of clarity on this issue shows the loopholes in the current processes.

- The government has been blamed for trying to use the spyware to target specific people. However, the government has stated that government agencies operate strictly as per provisions of law and a well-established protocol for interception.

- Government has claimed that reports of breach of privacy of Indian citizens on WhatsApp were attempts to malign the government and are completely misleading. The episode has taken up a political tone.

3. Coastal Flood Warning System app for Chennai (CFLOWS)

Why in News?

- The Vice President launched Coastal Flood Warning System app for Chennai (CFLOWS-CHENNAI) developed by the NIOT.

CFLOWS- CHENNAI:

- It is a Coastal Flood Warning System app for Chennai.
- It is India's first integrated coastal flood warning system.
- It was conceptualised by the office of the Principal Scientific Adviser to the Union Government, after the devastating 2015 Chennai floods.
- It is an integrated GIS-based decision support system to provide forecast on potential inundation 10 days in advance. It will be hosted and made operational at National Centre for Coastal Research (NCCR) with meteorological data inputs from India Meteorological Department (IMD), National Centre for Medium Range Weather Forecasting (NCMRWF) and Indian National Centre for Ocean Information Services (INCOIS). The system can simulate the scenario and predict what will happen in a particular area. It has 6 modules, including 3D visuals of flooding in infrastructure, buildings, roads and ward boundaries.

4. Dustlik 2019

Why in News?

- The Defence Minister spoke at the Curtain Raiser event of the first-ever India-Uzbekistan Joint Exercise 'Dustlik 2019' at Tashkent in Uzbekistan.

Dustlik 2019:

- Dustlik 2019 will be conducted for about ten days in November 2019 at Tashkent.
- This is a joint exercise of the armies of India and Uzbekistan.
- The exercise will enable sharing of best practices and experiences between the Armed Forces of the two countries and would lead to greater operational effectiveness.
- The primary focus will be on counterterrorism.

5. Exercise 'Samudra Shakti'

Why in News?

- India Navy and Indonesian navy hold Joint Naval Exercise "Samudra Shakti" In Bay Of Bengal.

Ex. Samudra Shakti:

- It is a joint exercise between Indian Navy and the Indonesian Navy.
- The joint exercises include manoeuvres, Surface Warfare exercises, Air Defence exercises, Weapon firing drills, Helicopter Operations and Boarding Operations.
- The Harbour Phase included professional interactions in the form of Subject Matter Expert Exchanges (SMEE), cross deck visits, simulator drills, planning conferences, sports fixtures and social interactions.

6. HADR Exercise TIGER TRIUMPH

Why in News?

- The maiden India – US joint tri-services Humanitarian Assistance and Disaster Relief (HADR) Exercise named 'TIGER TRIUMPH' is scheduled to be held in November 2019 for 9 days.

HADR Exercise TIGER TRIUMPH:

- TIGER TRIUMPH is the first joint Indo-US Humanitarian Assistance and Disaster Relief (HADR) exercise.
- It is aimed at developing interoperability for conducting HADR operations.
- **Participating teams from India:**
  - ✓ Indian Naval ships Jalashwa, Airavat and Sandhayak
  - ✓ Indian Army troops from 19 Madras and 7 Guards
  - ✓ Indian Air Force MI-17 helicopters and Rapid Action Medical Team (RAMT)
- **Participating teams from the USA:**
  - ✓ US Navy Ship Germantown
  - ✓ Troops from US Third Marine Division
- It is an exercise carried out on the Eastern coast of India starting with the Harbour Phase at Visakhapatnam. Personnel from both navies would participate in training visits, subject matter expert exchanges, sports events and social interactions.

  After this phase, the ships, with troops embarked, would sail for the Sea Phase and undertake maritime, amphibious and HADR operations.

  On reaching the HADR area at Kakinada, the landing of Relief Forces would be undertaken to the Exercise scenario.
- At the HADR Exercise Area, a Joint Command and Control Centre would be established jointly by the Indian Army and US Marines.

- The IAFRAMT and the US Navy Medical Team would establish a Medical Facility Camp for providing medical aid to victims, who would have been previously evacuated by road and air to the Camp.

7. Coalition for Disaster Resilient Infrastructure

Why in News?

- At the Leaders' Dialogue with BRICS Business Council and New Development Bank (NDB), the Prime Minister requests the BRICS countries and the NDB to join the Coalition for Disaster Resilient Infrastructure.

Coalition for Disaster Resilient Infrastructure (CDRI):

- In September 2019, PM Modi launched the CDRI at the UN Secretary-General's Climate Action Summit in New York, US.
- The fledgling partnership has a secretariat in Delhi, supported by the UN Office for Disaster Risk Reduction (UNDRR), to enable knowledge exchange, technical support and capacity building.
- CDRI's mission is to rapidly expand the development of resilient infrastructure and retrofit existing infrastructure for resilience, and to enable a measurable reduction in infrastructure losses.
- The partnership will be working in the areas of governance and policy, emerging technology, risk identification and estimation, recovery and reconstruction, resilience standards and certification, finance, and capacity development.
- CDRI is bringing together developed and developing countries to build synergies to reach the goal of disaster-resilient infrastructure.
- The World Bank and the Green Climate Fund (GCF) expressed support for CDRI and committed to working closely with its secretariat in Delhi.
- The formation of the Coalition is the result of efforts by India and UNDRR.
- **Other founding members of CDRI:**

✓ Australia	✓ Maldives
✓ Bhutan	✓ Mexico
✓ Fiji	✓ Mongolia
✓ Indonesia	✓ Rwanda
✓ Italy	✓ Sri Lanka
✓ Japan	✓ The UK

New Development Bank:

- The New Development Bank (NDB), formerly referred to as the BRICS Development Bank, is a multilateral development bank operated by the BRICS states.
- It is based in Shanghai.
- The bank's primary focus of lending will be infrastructure projects with authorized lending of up to $34 billion annually.
- South Africa will be the African Headquarters of the Bank named the "New Development Bank Africa Regional Centre".

8. Exercise Za'ir-Al-Bahr (Roar of the Sea)

Why in News?

- Joint Exercise between the Qatari Emiri Navy and the Indian Navy, Za'ir-Al-Bahr (the Roar of the Sea).

Exercise Za'ir-Al-Bahr:

- The inaugural edition of the bilateral exercise between the Indian Navy and the navy of Qatar (Qatari Emiri Navy) is being conducted in November 2019 at Doha.
- Exercise Za'ir-Al-Bahr 2019 would strengthen cooperation and enhance interoperability between the two navies.
- The Exercise will include a three-day Harbour Phase and a two-day Sea Phase. The activities during the harbour phase will include a seminar, professional interaction, official visits, and sports fixtures along with social and cultural events.
- The Sea Phase will include a Tactical Maritime Exercise involving the domains of Surface Action, Air Defence, Maritime Surveillance and Interdiction Operation and anti-terrorism.
- Indian Navy Guided Missile Stealth Frigate INS Trikand and Patrol Aircraft P8-I are participating in the event.
- INS Trikand is one of the frontline frigates of the Indian Navy equipped with a versatile range of weapons and sensors.
- The P8-I Maritime Patrol Aircraft incorporates the latest technology for Maritime Surveillance.

9. MK 45 Gun System

Why in News?

- The US State Department has approved the sale of naval guns and other equipment worth $1 billion to India for use against warships, anti-aircraft and shore bombardment.
- The sale includes 13 MK 45 5 inch/62 caliber (MOD 4) naval guns and some other equipment that will be manufactured by BAE Systems Land and Armaments.

MK 45 Gun System:

- The MK 45 is a fully automatic naval gun system that is installed on ships and provides a Naval Surface Fire Support (NSFS) range of more than 20 nautical miles (36 km) along with improved propelling charge.
- This system of guns is currently in use by the US Navy on their fleet of Ticonderoga class cruisers and Arleigh Burke class destroyers.
- MK 45 is an upgraded version with a 62 caliber barrel, strengthened gun and mount subsystems, advanced control system enhancements, greater range and firepower, a reduced signature and low maintenance gun shield.

MK 45 MOD 4 Gun:

- It is a light-weight version of the MK 42 5 inch/54 caliber gun mount meant to support expeditionary operations and engage surface and air targets.
- The MOD 4 configuration gun mount is believed to boost the firing range by over 50 per cent, increasing the speed and range of munitions.
- The principal contractor of the guns for this deal is Minneapolis-based BAE Systems Land and Armaments with a gun manufacturing unit in Louisville, Kentucky.
- It is meant for both naval gunfire support and to destroy any hostile anti-ship weapons and air defence systems.
- Other countries that have been sold the MOD 4 naval guns are Japan, Australia and South Korea.

Significance:

- The MK 45 Gun System will provide the capability to conduct anti-surface warfare and anti-air defence missions while enhancing interoperability with US and other allied forces.
- **India will use the enhanced capability as a deterrent to regional threats and to strengthen its homeland defence.**

10. The Bodoland Dispute

Why in News?

- The central government has extended the ban on the Assam-based insurgent group National Democratic Front of Bodoland (NDFB) by five more years for its involvement in a series of violent anti-state activities.

The Bodoland:

- Bodos are the single largest tribal community in Assam, making up over 5-6 per cent of the state's population. They have controlled large parts of Assam in the past.
- The four districts in Assam — Kokrajhar, Baksa, Udalguri and Chirang — that constitute the Bodo Territorial Area District (BTAD), are home to several ethnic groups.

What is the Dispute?

- The Bodos have had a long history of separatist demands, marked by armed struggle.
- In 1966-67, the demand for a separate state called Bodoland was raised under the banner of the Plains Tribals Council of Assam (PTCA), a political outfit.
- In 1987, the All Bodo Students Union (ABSU) renewed the demand. "Divide Assam fifty-fifty", was a call given by the ABSU's then leader, Upendra Nath Brahma.
- The unrest was a fallout of the Assam Movement (1979-85), whose culmination — the Assam Accord — addressed the demands of protection and safeguards for the "Assamese people", leading the Bodos to launch a movement to protect their own identity.
- In December 2014, separatists killed more than 30 people in Kokrajhar and Sonitpur. In the 2012 Bodo-Muslim riots, hundreds were killed and almost 5 lakh were displaced.

NDFB:

- Alongside political movements, armed groups have also sought to create a separate Bodo state.
- In October 1986, the prominent group Bodo Security Force (BdSF) was formed by Ranjan Daimary.
- The BdSF subsequently renamed itself as the National Democratic Front of Bodoland (NDFB), an organisation that is known to be involved in attacks, killings, and extortions.
- In the 1990s, Indian security forces launched extensive operations against the group, causing the latter to flee to bordering Bhutan.
- In Bhutan, the group faced stiff counter-insurgency operations by the Indian Army and the Royal Bhutan Army in the early 2000s.

11. Exercise MILAN 2020

Why in News?

- Naval Exercise MILAN 2020 is scheduled to be held at Vishakhapatnam in March 2020 in which 41 countries have been invited.

Highlights:

- The Government pursues cooperation initiatives with friendly foreign countries including in Indian Ocean Region through structured interactions like Staff Talks, Empowered Steering Group etc.
- The areas of cooperation include Capacity Building, Marine Domain Awareness, Training, Hydrography, Technical Assistance, Operational Exercise etc.
- 41 countries including Oman, Qatar, Kuwait, Saudi Arabia, Bahrain, Bangladesh, South Korea, the US, the UK, Australia, Vietnam, Myanmar, Iran, Sri Lanka, Thailand among others are going to participate.

12. Exercise Him Vijay

Why in News?

- Indian Army undergoing its biggest transformation has started its Biggest Mountain Assault Exercise.

Exercise Him Vijay:

- The Indian Army Conducts routine military exercises every year.
- It was one such endeavour. It was conducted to validate operational capabilities of our combat formations.
- The exercise is to test mobility, communication and coordination of such huge body of fast-moving troops in difficult terrain.
- Indian Army is metamorphosing itself to incorporate changes for modern and quick and short war, added the Army officer.
- During the last three years and the current year, about 72 joint exercises were conducted by Army, 39 by Navy, 21 by Air Force and 2 Tri-Service Exercises were conducted.