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IAS MAINS 2020

LIVE & INTERACTIVE CLASSES

MAINS 2020 CLASSES

- 1 GS MAINS QIP
- 2 ETHICS CLASSES
- 3 ESSAY CLASSES
- 4 POL. SC. ADVANCE
- 5 PUB AD. ADVANCE

MAINS 2020 TEST SERIES

- 1 GS MAINS TEST SERIES
- 2 ETHICS & ESSAY TEST SERIES
- 3 POL. SC. TEST SERIES
- 4 PUB. ADM. TEST SERIES
- 5 HISTORY TEST SERIES

**Courses will be conducted according to UPSC Prelims
Examination Date Announcements**

1

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**HISTORY
& CULTURE**

1

DEVELOPMENT OF SPIRITUAL CIRCUIT: SREE PADMANABHA SWAMY TEMPLE-ARANMULA-SABARIMALA

Context:

- Prime Minister of India inaugurated the project "Development of Spiritual Circuit: Sree Padmanabha Swamy Temple-Aranmula-Sabarimala" being implemented under the Swadesh Drashan Scheme of Ministry of Tourism, Government of India.

About:

- The project 'Development of Spiritual Circuit: Sree Padmanabhaswamy Temple-Aranmula-Sabarimala' was sanctioned by the Ministry of Tourism in 2016-17.
- A majority of the work under this project has been carried out at the **Sree Padmanabha Swamy Temple**.
- The Sree Padmanabhaswamy Temple is one of the 108 divyadesams of Lord Vishnu. The temple is situated in Thiruvananthapuram district of the state Kerala in India.
- The prime deity of the Padmanabhaswamy Temple is Lord Vishnu. He is seen in his "**Ananta Shayana**" posture, i.e., resting on his Adisheshan (snake) and deeply immersed in yogic sleep.
- The temple witnesses huge footfall throughout the year. However, the temple precinct did not establish a sense of arrival to the revered destination nor were the amenities sufficient to cater to the tourists.
- Under this project, the Ministry has developed and rejuvenated the temple and its surroundings keeping in mind the factors of heritage and socio-cultural aspects.

Swadesh Darshan scheme

- The scheme was launched by Union Tourism Ministry with objective to develop theme-based tourist circuits in the country.
- Under this scheme, 13 thematic circuits have been identified for development. They are Buddhist Circuit, North-East India Circuit, Coastal Circuit, Himalayan Circuit, Krishna Circuit, Desert Circuit, Eco Circuit, Wildlife Circuit, Tribal Circuit, Rural Circuit, Spiritual Circuit, Ramayana Circuit and Heritage Circuit.
- It is 100% centrally funded scheme for project components undertaken for public funding. It also has provision for leveraging voluntary funding under Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and corporate sector.

PRASAD SCHEME

- National Mission on Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD) aims to beautify and improve the amenities and infrastructure at pilgrimage centres of all faiths.
- Under the scheme, 13 sites have been identified for development, namely: Amritsar, Ajmer, Dwaraka, Mathura, Varanasi, Gaya, Puri, Amaravati, Kanchipuram, Vellankanni, Kedarnath, Kamakhya and Patna.
- Under the 'PRASAD' scheme the focus is on development and beautification of the identified pilgrimage destinations. Whereas, in the 'Spiritual Circuit' identified under the Swadesh Darshan scheme, the thrust is on development of particular thematic circuit consisting of various religious/spiritual destination in a State and Union Territory.

2

NATIONAL MUSEUM OF INDIAN CINEMA (NMIC)

Context:

- The National Museum of Indian Cinema or Bollywood's museum, is India's only museum on cinema, inaugurated in Mumbai on January 19, 2019.

About:

- The development of the Museum was guided by the **Museum Advisory Committee** headed by **Shyam Benegal**. An innovation Committee headed by **Prasoon Joshi** provided an upgrade to the NMIC.
- The museum depicts the journey of over a century of Indian cinema in a story telling mode with the help of visuals, graphics, artifacts, interactive exhibits and multimedia expositions.
- The museum, built in two phases, is housed in two adjacent buildings.
 - The first one is in the freshly-restored heritage building Gulshan Mahal on the Films Division's premises on Peddar Road. It displays a rare collection of static artefacts, vintage equipment, various memorabilia and other exhibits to take visitors through India's over-a-century-old cinematic journey.
 - The second part of the museum is housed in a modern building next to Gulshan Mahal. It have over 40 interactive galleries devoted to cinema across India, the journey of Indian cinema from the silent era to talkies, technology and creativity in cinema as well as a children's activity gallery.

Four Exhibition Halls

- **Gandhi & Cinema:** It not only depicts the movies made on the life Mahatma Gandhi but also showcases the deep impact his life had on cinema.
- **Children's Film Studio:** It gives visitors, particularly children, an opportunity to explore the science, technology and art behind filmmaking. It offers hands on experience on various facets associated with making cinema like camera, light, shooting, experience of acting, etc. – presented in an interactive format. The exhibits displayed include chroma studio, immersive experience zone, stop-motion animation studio, virtual makeover studio, etc.
- **Technology, creativity & Indian cinema:** It showcases the creative use of technology by Indian film makers over the years to produce cinematographic impact on the silver screen.
- **Cinema across India:** It showcases the charismatic kaleidoscopic presence of the vibrant cinematographic culture across India.

3

PRAYAGRAJ KUMBH MELA 2019

Context:

- Prayagraj Kumbh Mela 2019 has been placed in the **Guinness World Records** in three sectors.

About:

- Kumbh Mela is a mass gathering of Hindu devotees who congregate to bathe in a sacred river. According to tradition, there are four fairs which are accepted as the Kumbh Melas:
 - the Prayagraj Kumbh Mela
 - Haridwar Kumbh Mela
 - the Nashik-Trimbakeshwar Simhastha
 - Ujjain Simhastha
- The key festival site is on the banks of a river: It is the **Ganga at Haridwar**; the meeting of the Ganga and Yamuna and Saraswati at Prayagraj; the Godavari at Nashik; and Shipra at Ujjain.

4

PM PAYS TRIBUTES TO THE MARTYRS OF THE JALLIANWALA BAGH MASSACRE

Context:

- April 13th 2020 marked the 101st anniversary of the historical **Jallianwala Bagh Massacre**.

About:

- The Jallianwala Bagh massacre, which came barely months after the Armistice on November 11, 1918 ended World War I in Europe, occurred as undivided Punjab was struggling and in ferment.
- The situation in Punjab was alarming as there were riots and protests against the **Rowlatt Act**.
- Punjab was put under martial law which meant that it became unlawful for more than 4 people to assemble at a place.
- The Lieutenant-Governor of Punjab at that time was **Michael O'Dwyer**. **Lord Chelmsford** was India's Viceroy.
- On the day of the festival of Baisakhi on 13th April 1919 in Jallianwala Bagh, a public garden in Amritsar, a crowd of non-violent protestors had gathered. Also among the crowd were pilgrims who had come to celebrate Baisakhi.
- General Dyer came there with his troops and blocked the only narrow entrance to the garden. Then, without warning, he ordered his troops to fire at the unarmed crowd which included children as well.
- The indiscriminate firing went on for about 10 minutes which resulted in the deaths of at least 1000 people and injured more than 1500 people.
- This tragedy came as a rude shock to Indians and totally destroyed their faith in the British system of justice.

5

NATIONAL TRANSLATION MISSION

Context:

- 40 Knowledge Text translations have been published in 16 languages under National Translation Mission (NTM)

What is National Translation Mission?

- NTM is a scheme launched in 2008 which is being implemented through the **Central Institute of Indian Languages (CIIL)**, Mysore to establish translation as an industry in general and to facilitate higher education by making knowledge texts accessible to students and academics in Indian languages.
- Under the scheme, the books of knowledge texts mostly text books of various subjects prescribed in Universities and Colleges are being translated in all Languages of the **8th Schedule** of the Constitution of India.
- NTM has so far published 40 Knowledge Text translations in 16 languages (Assamese, Bengali, Bodo, Dogri, Hindi, Kannada, Maithili, Malayalam, Manipuri, Marathi, Nepali, Odia, Punjabi, Tamil, Telugu and Urdu).
- NTM has published 6 bilingual dictionaries (English to Indian languages) in collaboration with **Pearson Education, India**.
- The Mission has trained about 1400 budding translators through 3-week intensive courses (21 days) on 'Introduction to translation' and 'Research Methodology in Translation'.

6 MURAL PAINTINGS

Context:

- **Archeological Survey of India (ASI)** and **Indira Gandhi National Centre for the Arts (IGNCA)**, an autonomous organization) under the **Ministry of Culture** are actively involved in the Government's endeavour for conservation of Mural Paintings and ancient folk paintings which are on the verge of extinction.

What is Mural painting?

- Mural paintings have a prolonged tradition, significance and history in Indian Art. This piece of artwork is directly painted or applied on the surface of a wall or ceiling or other permanent facades.
- The seamless and harmonious incorporation of architectural elements are the unique characteristics of these paintings which make them eye catching and adorable.
- The history of Indian murals starts in ancient and early medieval times, from 2nd century BC to 8th – 10th century AD.
- There are known more than 20 locations around India containing murals from this period, mainly natural caves and rock-cut chambers.
- The highest achievements of this time are the caves of Ajanta, Bagh, Sittanavasal, Armamalai Cave (Tamil Nadu), Ravan Chhaya rock shelter, Kailasanatha temple in Ellora Caves.

Recent initiatives:

- IGNCA has signed MOU with **Central Institute of Buddhist Studies** (a Deemed University), Leh, Ladakh to explore, research, and for field work and capacity building programme in this domain.
- The project titled '**The Condition of Buddhist Wall Painting Sites in Jammu and Kashmir and Himachal Pradesh (Tribal and Backward Areas)**' aimed to develop a laboratory in Ladakh in collaboration with the partner institute especially for Himalayan material – thangkha and manuscript, with wall painting as a super specialty.
- In Jammu and Kashmir, the conservation work of **Karsha Monastery**– Nyingm/lakhangand, **Gonkhang**–Thiksey monastery and in Himachal Pradesh, conservation work of Maitreay Temple (Hunder- Nurba), Saboo and Diskit monasteries has been done by IGNCA.
- **Saboo and Diskit Monasteries** have a sizeable collection of tangkha that are not in use for puja.

7 INTERNATIONAL FILM FESTIVAL OF INDIA (IFF)

Context:

- IFFI marks the **Golden Jubilee Edition**.

About IFFI

- It is organized by the Government of India from 20th to 28th November every year in Goa.
- It aims at providing a common platform to the world of cinema to project the excellence of the art of filmmaking.
- It is India's most prestigious Film Festival and also the first International Film Festival held anywhere in Asia. It has been hosted by the state of Goa in 2004.
- The key sections at IFFI include International Competition, Festival Kaleidoscope, World Panorama, Indian Panorama, Masterclasses, In-conversations, Special Retrospectives, Homages, Open Air Screenings, Film Bazaar - organized by NFDC, etc.

8

AADIMAHOTSAV

Context:

- 9-Day National Tribal Festival **AadiMahotsav** started at Leh-Ladakh on 17th August, 2019.

About

- AadiMahotsav (National Tribal Festival)** is a joint initiative of Ministry of Tribal Affairs, Government of India & Tribal Cooperative Marketing Development Federation of India (TRIFED)
- The theme of the festival was: "A celebration of the spirit of Tribal Craft, Culture and Commerce".
- Ladakhi folk dances like Jabro Dance and Spawo dance were performed in the event.
- The tribes constitute over 8% of the country's population and this festival is featuring the products made by tribals
- This festival is presenting the Adivasi way of life which is guided by primal truths, eternal values and a natural simplicity.
- At the AadiMahotsav, an effort is also being made to take tribal commerce to the next level of digital and electronic transactions. The Mahotsav apart from exotic handicrafts has also showcased the electronic and digital skills of the tribals as a special attraction.

TRIFED

- ▶ The Government has formed the Tribal Cooperative Marketing Development Federation of India (TRIFED) for achieving the objective of increasing the livelihood for tribals. TRIFED is doing significant work in this direction and have now embraced e-commerce and digital platforms to take the business forward.
- ▶ It was established in 1987.

9

MAHATMA GANDHI

Context:

- To commemorate the 150th birth anniversary of Mahatma Gandhi – a global icon of peace and non-violence, Prime Minister Narendra Modi hosted a high-level event on the sidelines of the 74th UNGA in the ECOSOC Chamber of the UN Headquarters.

About

- The event was graced by **H.E. Mr. António Guterres**, Secretary General of the UN, **H.E. Mr. Moon Jae-in**, President of the Republic of Korea, **H.E. Mr. Lee Hsien Loong**, Prime Minister of the Republic of Singapore, **H.E. Ms. Sheikh Hasina**, Prime Minister of the People's Republic of Bangladesh, **H.E. Mr. Andrew Holness**, Prime Minister of Jamaica and **H.E. Ms. Jacinda Ardern**, Prime Minister of New Zealand.
- Gandhi Solar Park at the UN Headquarters (contributed by Government of India to the UN), the Gandhi Peace Garden at State University of New York College at Old Westbury were inaugurated.
- The special commemorative edition of the Gandhi@150 Postage Stamps brought out by the UN Postal Administration was unveiled.
- Contributions of Mahatma Gandhi to the cause of greater human freedom in the 20th century; emphasis on the welfare of all (Sarvodaya); championing of the downtrodden (Antyodaya); and prescient concern for environmental sustainability were highlighted.

- Mahatma Gandhi's faith in collective will, shared destiny, moral purpose, people's movements and personal responsibility are extremely germane to contemporary times.
- The violent conflict, terrorism, economic inequalities, socio-economic deprivation, pandemics and the looming existential threat of climate change are impacting people, states and societies. Leadership is crucial to addressing any and every one of these issues and the values promoted by Gandhi serve as moral compass for enlightened leadership.

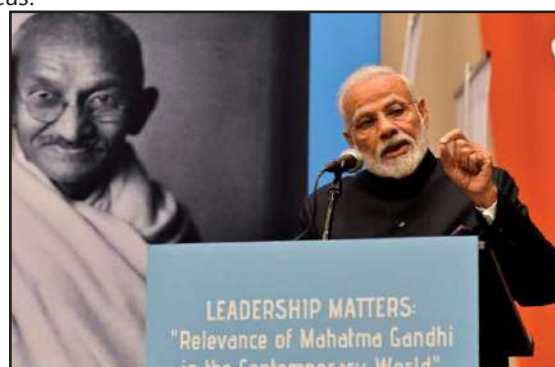
10 THE GANDHIAN CHALLENGE

Context:

- On the 150th birth Anniversary of Mahatma Gandhi, AIM, NITI Aayog's Atal Tinkering Labs (ATL) and UNICEF India, including Generation Unlimited, have launched 'The Gandhian Challenge'.

What is Gandhian Challenge?

- This innovation challenge provides a platform for every child across India to ideate innovative solutions for a sustainable India of their dreams, using Gandhi's principles.
- The winners of The Gandhian Challenge will be awarded in New Delhi by NITI Aayog's Atal Innovation Mission and UNICEF on the occasion of Children's Day in November.
- Through this partnership, AIM and UNICEF recognize every child's ability and right to voice their dreams for a world of their choice, following Gandhi's principles.
- The most innovative, sustainable solutions/ideas will be showcased as a symbol of a larger movement by children taking root in every district of India. Children across India can access to more than 8000 Atal Tinkering Labs across all districts to support their innovative ideas.
- In ATLs, students of class 6th to 12th acquire a problem-solving attitude, develop innovative solutions leveraging technologies like 3D printers, robotics, miniaturised electronics, IOT and programming and DIY kits, with support from teachers and mentors.



Atal Innovation Mission (AIM):

- AIM is Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country.
- AIM's objective is to develop new programmes and policies for fostering innovation in different sectors of the economy, provide platform and collaboration opportunities for different stakeholders, create awareness and create an umbrella structure to oversee innovation ecosystem of the country.

Six major initiatives of AIM:

- Atal Tinkering Labs-Creating problem-solving mindset across schools in India.
- Atal Incubation Centers-Fostering world class start-ups and adding a new dimension to the incubator model.
- Atal New India Challenges-Fostering product innovations and aligning them to the needs of various sectors/ministries.
- Mentor India Campaign- A national Mentor network in collaboration with public sector, corporates and institutions, to support all the initiatives of the mission.
- Atal Community Innovation Center- To stimulate community centric innovation and ideas in the unserved/underserved regions of the country including Tier 2 and Tier 3 cities.
- ARISE-To stimulate innovation and research in the MSME industry.

About UNICEF India and Generation Unlimited:

- UNICEF, an integral part of the United Nations, works with governments, communities, civil society organizations, the private sector, and other partners worldwide to advance children's rights, and is guided by the Convention on the Rights of the Child.
- Generation Unlimited is a new UNICEF-led global partnership that aims to ensure that every young person age 10-24 is in some form of school, learning, training, self-employment, or age-appropriate employment by 2030. It aims to co-create and scale up proven solutions related to secondary age- education, skills for learning, employability and decent work, and empowerment, with a focus on girls.

11

MUMBAI- UNESCO CREATIVE CITIES NETWORK (UCCN)

Context:

- 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

About:

- 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.
- 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.
- They work together towards a common mission: placing creativity and the creative economy at the core of their urban development plans to make cities safe, resilient, inclusive and sustainable, in line with the United Nations 2030 Agenda for Sustainable Development.
- The 7 categories for recognition under UCCN are as follows-
 - Crafts and Folk Arts
 - Design
 - Film
 - Gastronomy
 - Music
 - Media Arts
 - Literature

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)

12

MUSEUM OF ANTIQUITIES

- The Government/Archaeological Survey of India (ASI) will set up another museum to house objects excavated from across India which have been lying in the **Central Antiquities Collection (CAC)** at Purana Quila.

Highlights

- The museum will be housed in the arched cells of Purana Quila. Central Antiquity Collection Section is a centre for housing the collection of antiquities explored and excavated by Archaeological Survey of India.
- These antiquities date back from the Prehistoric period to post Independence era.
- The objective to open new museum is to display antiquities such as tools, potteries, terracotta, beads of semi-precious stones, sculptures, architectural fragments, etc. for general public, students and research scholars.

13

REFURBISHED HERITAGE BUILDINGS IN KOLKATA

- The Prime Minister Shri Narendra Modi dedicated to the nation Four Refurbished Heritage Buildings in Kolkata- **Old Currency Building, the Belvedere House, the Metcalfe House and the Victoria Memorial Hall.**

Important facts of the Heritage Sites:

- **Old Currency Building:**
 - The Currency Building in the Dalhousie area was constructed in 1833 bearing European architecture.
 - This is a handsome three storied building, designed in Italian style, the walls were made of brick.
 - It is still one of the oldest buildings that operated as a bank in the country.
 - As the name suggests, it served as Reserve Bank of India (RBI) after which it degraded till in 2002. Archaeological Survey of India (ASI) declared it a protected monument.

The Belvedere House:

- Belvedere House is said to have been Warren Hastings' abode till the 1780s.
- It is believed to be one of the many houses built by Mir Jafar (who became the Nawab of Bengal after betraying Siraj-ud-daulah in the Battle of Plassey).
- Belvedere House was the former palace for the Viceroy of India and later the Governor of Bengal.
- Belvedere is currently the National Library of India.

The Metcalfe House:

- The Metcalfe Hall was erected as its name imparts to perpetuate the memory of Lord Metcalfe, who officiated as Governor General of India from March 1835 to March 1836.
- It was originally conceptualised as a Public Library later on housed the Imperial Library.

The Victoria Memorial Hall:

- Built between 1906 and 1921, the Victoria Memorial Hall is dedicated to the memory of Victoria.
- Now, it is a museum and tourist destination under the auspices of the **Ministry of Culture.**
- The upgraded and renovated versions of these historic buildings will now be open to hosting world-class art festivals or exhibitions, with immediate effect.

14

CLASSICAL LANGUAGES

- Classical languages are those which are ancient, of an independent nature and not a derivative of any other tradition.
- The criteria evolved by Government to determine declaration of a language as a Classical language is as under:

- High antiquity of its early texts/recorded history over a period of 1500-2000 years
- A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers
- The literary tradition be original and not borrowed from another speech community
- The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots.
- Today six languages are included in the list of Classical Languages: Tamil (since 2004), Sanskrit (since 2005), Telugu (since 2008), Kannada (Since 2008), Malayalam (since 2013), Odiya (since 2014).

15 DECCAN QUEEN EXPRESS

Context

- Indian Railways' one of the most iconic train which has got a great historic value is finally ready for a major facelift.

About Deccan Queen:

- Indian Railways' Deccan Queen, which has been running between Mumbai and Pune since 1930, is the country's first superfast train
- Deccan Queen is the first long-distance electric-hauled train, first vestibuled train, the first train to have a 'ladies only' car and the first train to feature a dining car
- The 90-year-old Train will finally be upgraded to German design Linke Hofmann Busch (LHB) coaches.
- The train currently runs on ICF coaches with a unique existing livery of blue and white colour with a red band.

16 THE CENTRAL SANSKRIT UNIVERSITIES BILL, 2020

- The Central Sanskrit Universities Bill, 2020 has been passed by the Parliament.
- This bill will convert:
 - Rashtriya Sanskrit Sansthan, New Delhi
 - Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi
 - Rashtriya Sanskrit Vidyapeeth, Tirupati **into Central Sanskrit Universities.**
- These 3 universities will have more opportunities to spread the knowledge of Sanskrit language not only in India but also across the world in a better way.
- This will pave way for many people from abroad to learn Sanskrit and Shastraic lore from these prestigious Central Sanskrit Universities in our country.



**INDIAN
POLITY**

1 FIFTEENTH FINANCE COMMISSION

Context

- The Fifteenth Finance Commission submitted its report for the financial year 2020-21 to President Ram Nath Kovind.

15th Finance Commission

- In November 2017, President of India constituted the 15th Finance Commission and appointed former Planning Commission member NK Singh as its chairman.
- Composition:** Nand Kishore Singh (Chairman), Ajay Narayan Jha, Ashok Lahiri, Anoop Singh and Ramesh Chand (part-time member). Shaktikanta Das resigned as a member of the commission after appointed as RBI Governor.
- Terms of Reference:** To give recommendations
 - For devolution of taxes and other fiscal matters for five fiscal years, commencing 1 April 2020
 - On strengthen cooperative federalism, improve the quality of public spending and help protect fiscal stability.
 - To examine whether revenue deficit grants be provided at all
 - To consider the impact of fiscal situation of the Union government of substantially enhanced devolution by the 14th Finance Commission, coupled with continuing imperative of the national development programme including New India 2022.

Major recommendation of the Commission

- The Commission adopted 6 criteria in three broad categories – Need-Based (Population, Area, Forest & Ecology), Equity-Based (Income Distance), Performance-based (Demographic Performance, Tax Effort).
- The criterion of 'Forest Cover' is replaced by three new criteria– Forest & Ecology, Demographic Performance, Tax Effort.
- Weightage of 'Income Distance' is reduced from 50% to 45%. This criterion measures the distance of a particular state's income with that of the state with the highest income. States with higher income distance are given preference in order to bring them on parity.
- Forest & Ecology is given 10% weightage by the 15th FC. The score for each state is derived by calculating the share of the dense forest of each state in the aggregate dense forest of all the states.
- The performance of states in population control is rewarded by the inclusion of Demographic Performance as a criterion (with 12.5% weightage). States with lower fertility rates are given a higher score.
- 2.5% weightage is provided for 'Tax Effort' in recognition of states efforts in effective tax collection.

2 REPRESENTATION OF THE PEOPLE ACT, 1951

Context:

- The Committee constituted under the chairmanship of Umesh Sinha to review and suggest modifications and changes in the provisions of the Section 126 and other sections of the Representation of the People Act 1951, provisions of Model Code of Conduct and any other ECI instruction in this regard has submitted its report to the Commission.

The Committee had the following scope of work:

- Study and examine the present provisions of the Section 126 and other related Sections of the Representation of the People Act, 1951 and identify difficulties/critical gaps to regulate the violation of

the said provisions of the act, particularly during the prohibitory period of 48 hours before the completion of the poll, mentioned in section 126 and suggest necessary amendment/modification.

- Examine the type, category or growth of communication technology or media platform in the country and difficulties in regulating these media platforms during multiphase election when prohibitory period of 48 hours are in force.
- Impact of new media platforms and social media during the prohibitory period of 48 hours before the close of poll and its implication in view of the provisions of section 126.
- Examine the present provisions of Model Code of Conduct (MCC) related to the above issues and suggest modification in this regard.

Recommendations:

- Internet service providers and social media companies should take down content violating the 48-hour ban on campaigning prior to polling, instantly and latest within 3 hours of EC issuing such a direction.
- Amend Section 126(1) of R P Act to impose the "campaign silence period" on print, electronic media and intermediaries. The definition of intermediaries, as per Section 2(w) of the Information Technology Act, includes telecom service providers, internet service providers, web-hosting service providers, search engines, etc.
- Bring in changes in the model code of conduct to ensure that parties release their manifesto at least 72 hours prior to polling (or 72 hours prior to polling for first phase in a multi-phase election).
- Star campaigners should desist from addressing press conferences or giving interviews on election matters during silence period. Also, in a multi-phased election, there should be no direct or indirect reference seeking support for parties/candidates in constituencies observing silence period.
- Intermediaries should ensure that their platforms are not misused to vitiate free and fair polls. This would include a notification mechanism by which EC may notify the platform of potential violations of Section 126 of R P Act.
- While EC will appoint an officer to liaise with the intermediaries, the latter should open a special grievance redressal channel for EC and have a dedicated team during election period to interface with and take quick action on receipt of EC order to take down or disable content in violation of R P Act.
- Intermediaries should report to the Commission on measures taken to prevent abuse of their platforms, including generating publicly-available action taken reports. All political advertisements may be clearly labelled as such and be pre-approved by an EC-appointed content monitoring committee.
- The intermediaries would also need to maintain a repository of political advertisements with information on their sponsors, expenditure and targeted reach.
- The recommendations made by the Committee, when implemented (after adoption by the ECI with necessary modification or additions), will help in minimizing the possible interference of activities which aim at indirectly influencing voters during the valuable silence period of 48 hours provided to them.
- The recommendations of the Committee will be considered by the Commission in detail for follow up action.

Section 126 of the Representation of the People Act, 1951

- ▶ Section 126 of the Representation of the People, 1951, prohibits displaying any election matter by means, inter alia, of television or similar apparatus, during the period of 48 hours before the hour fixed for conclusion of poll in a constituency.

3

DEPUTY COMPTROLLER AND AUDITOR GENERAL IN THE OFFICE OF COMPTROLLER AND AUDITOR GENERAL OF INDIA

Context:

- The Union Cabinet gave its approval to create one post of **Deputy Comptroller & Auditor General (Coordination, Communication and Information System)** in Pay Level-17 (by abolishing one STS level post) in the Office of the Comptroller & Auditor General of India.

About:

- The Deputy Comptroller & Auditor General shall oversee the coordination among State Audits, audit of telecommunication and to coordinate the various Information Systems (IS) initiatives within the Indian Audit & Accounts Department (IA&AD).
- Expenditure on account of creation of this post will be Rs.21 Lakh (approx.).

Comptroller and Auditor General (CAG)

- ▶ The Comptroller and Auditor General (CAG) of India is an authority, established by the Constitution of India under **article 148**.
- ▶ CAG audits all receipts and expenditure of the Government of India and the state governments, including those of bodies and authorities substantially financed by the government.
- ▶ The CAG is also the external auditor of Government-owned corporations and conducts supplementary audit of government companies, i.e., any non-banking/ non-insurance company in which the state and Union governments have an equity share of at least 51% or subsidiary companies of existing government companies.
- ▶ The reports of the CAG are taken into consideration by the Public Accounts Committees (PACs) and Committees on Public Undertakings (COPUs), which are special committees in the Parliament of India and the state legislatures.
- ▶ The CAG enjoys the same status as a judge of Supreme Court of India in Indian order of precedence.
- ▶ **Appointment:** CAG is appointed by the President of India following a recommendation by the Prime Minister. On appointment, he/she has to make an oath or affirmation before the President of India.
- ▶ **Removal:** The CAG can be removed only on an address from both house of parliament on the ground of proved misbehaviour or incapacity. The CAG vacates the office on attaining the age of 65 years age even without completing the 6 years term.

4**INTER-STATE RIVER WATER DISPUTES BILL, 2019****Context:**

- The Union Cabinet has approved the **Inter-State River Water disputes (Amendment) Bill, 2019** for adjudication of disputes relating to waters of inter-State rivers and river valley.

Impact:

- Constitution of a single tribunal with different benches along with fixation of strict timelines for adjudication will result expeditious resolution of disputes relating to inter-state rivers.
- The amendments in the Bill will speed up the adjudication of water disputes referred to it.
- When any request under the Act is received from any State Government in respect of any water dispute on the inter-State rivers and the Central government is of the opinion that the water dispute cannot be settled by negotiations, the Central Government constitutes a Water Disputes Tribunal for the adjudication of the water dispute.

5

NCST RECOMMENDS INCLUSION OF UNION TERRITORY OF LADAKH UNDER 6TH SCHEDULE

Context:

- National Commission for Scheduled Tribes (NCST) recommended inclusion of Union Territory of Ladakh under 6th Schedule of Constitution of India.

Ministry/Agency: Ministry of Tribal Affairs

About:

- The Commission took note of the fact that the newly created Union Territory of Ladakh is predominantly a tribal region in the country.
- The Scheduled Tribe population represent 66.8 percent in Leh, 73.35 percent in Nubra, 97.05 percent in Khalsti, 83.49 per cent in Kargil, 89.96 per cent in Sanku and 99.16 per cent in Zaskar areas of the Ladakh region.
- The official figures, however, does not include a number of communities including SunniMuslims in the region, who are claiming for Scheduled Tribe status. Taking into account this, the total tribal population in Ladakh region is more than 97 percent.
- The region is inhabited by following Scheduled Tribes, namely:
 - Balti
 - Beda
 - Bot, Boto
 - Brokpa, Drokpa, Dard, Shin
 - Changpa
 - Garra
 - Mon
 - Purigpa.
- The Commission noted that prior to creation of Union Territory of Ladakh, people in Ladakh region had certain agrarian rights including right on land which restricted people from other parts of the country to purchase or acquire land in Ladakh.
- Similarly, the Ladakh region has several distinct cultural heritages by communities such as Drokpa, Balti and Changpa, among others, which needs to be preserved and promoted.
- The provisions under paragraph (1) of the Sixth Schedule regarding autonomous districts and autonomous regions states that the tribal areas in each item of Parts I, II and II(A) and in Part-III of the table appended to paragraph 20 of Sixth Schedule shall be an autonomous district.
- Further, paragraph 21 of the Sixth Schedule empowers Parliament to amend any provisions of the schedule.
- The Commission is of the view that the autonomous district councils of erstwhile Union Territory of Mizoram had helped in mitigating the genuine aspirations of people. Similarly, Clause 3(58) (b) of the General Clauses Act 1897 defines State shall mean a State specified in the First Schedule to the Constitution and shall include a Union Territory.
- The Commission after careful consideration recommends that the Union Territory of Ladakh be brought under the Sixth Schedule of the Constitution. The Commission feels that this will help in:
 - Democratic devolution of powers;
 - Preserve and promote distinct culture of the region.
 - Protect agrarian rights including rights on land
 - Enhance transfer of funds for speedy development of Ladakh region.

6

CONSTITUTION DAY

- Constitution Day or Samvidhan divas, is celebrated today across the country **to mark the adopting of the Indian Constitution by the Constituent Assembly on this day in 1949.**
- It **came into force on 26th January, 1950**, marking the beginning of a new era in the history of Indian Republic. The government has planned yearlong activities throughout the country to mark **70 years of the adoption of the Constitution.**
- Constitution Day was first celebrated in 2015, when Narendra Modi Government decided to **mark the day as a tribute to Dr B R Ambedkar** who played an important role in its framing as the Chairman of the Drafting Committee.
- The constituent assembly **took two years, eleven months and seventeen days** to accomplish the stupendous task of drafting the historic document.
- The Constitution declares **India a sovereign, socialist, secular, democratic republic**, assuring its citizens justice, equality and liberty and endeavours to promote fraternity.

7

POLITICAL PARTIES REGISTRATION TRACKING MANAGEMENT SYSTEM (PPRTMS)

- The Election Commission of India has reviewed the system and process of registration of political parties. The new guidelines will be effective from 1st January, 2020.
- Accordingly the "Political Parties Registration Tracking Management System" (PPRTMS) will be implemented through an online portal, to facilitate tracking of status of application by applicants.
- The salient feature in the Political Parties Registration Tracking Management System is that the applicant (who is applying for party registration from 1st January, 2020 onwards) will be able to track the progress of his / her application and will get status update through SMS and email.
- The applicant is required to provide contact mobile number and email address of the party / applicant in his application if he/she wishes to track the progress of the application.

Registration of political parties

- The Registration of Political Parties is governed by the provisions of section 29A of the Representation of the People Act, 1951.
- A party seeking registration under the said section with the Commission has to submit an application to the Commission within a period of 30 days following the date of its formation in prescribed format with basic particulars about the party such as name, address, membership details of various units, names of office bearers, etc, as required under sub-section (4) of the said section, and such other particulars that the Commission has specified under sub-section (6) of Section 29A of the Representation of the People Act, 1951, as mentioned in the Guidelines for registration.

पिब

GOVERNANCE

1

DEVELOPMENT OF PARTICULARLY VULNERABLE TRIBES GROUPS (PVTG)

Context:

- The Ministry of Tribal Affairs implemented a scheme namely **“Development of Particularly Vulnerable Tribes Groups (PVTG)”** for the welfare of PVTGs.

About:

- Development of Particularly Vulnerable Tribes Groups (PVTG)** is a demand driven scheme.
- The scheme is flexible as it enables the States/Union Territory (UT) to focus on areas that they consider is relevant to PVTGs and their socio-cultural environment while retaining the culture and heritage of the community by adopting habitat development approach and intervening in all spheres of their social and economic life.
- Activities under the scheme include housing, land distribution, land development, agricultural development, animal husbandry, construction of link roads, culture, installation of non-conventional sources of energy for lighting purpose, social security or any other innovative activity meant for the comprehensive socio-economic development of PVTGs.
- The activities/projects sanctioned under the scheme differ from state to state depending on demand raised by respective State Governments/UT.

Particularly Vulnerable Tribal Groups (PVTGs):

- The PVTGs are the marginalized section of the Scheduled tribes of India. They are a section who is relatively isolated, educationally and socio-economically backward, living in a habitat far away from amenities.
- PVTGs is not a Constitutional category, nor are these constitutionally recognized communities.

The criteria followed for determination of PVTGs are as under:

- A pre-agriculture level of technology
- A stagnant or declining population
- Extremely low literacy
- A subsistence level of economy.

2

MODIFYING THE LIST OF THE SCHEDULED TRIBES IN KARNATAKA

Gist of Bill:

- On the basis of recommendation of State of Karnataka, it is proposed to amend Constitution (Scheduled Tribes) Order, 1950 relating to Karnataka to grant Scheduled Tribe status to and to include the communities, namely
 - “Parivara and Talawara as Synonyms of ‘Nayaka’
 - “Siddi” community of Dharwad and Belagavi districts along with existing ‘Siddi’ community of Uttar Kannada district in the list of **Scheduled Tribes** of Karnataka.

Background:

- The first specification of Scheduled Tribes in relation to a particular State or Union territory is by a notified Order of the President, after consultation with the State Government / UT concerned.

- Any subsequent inclusion in or exclusion from and other modifications in the list of Scheduled Tribes can be made only through an amending Act of Parliament.

Major Impact:

- This will fulfill the long term demand of 'Parivara' and 'Talawara' communities for granting Scheduled Tribes status in the State of Karnataka.
- The demand of 'Siddi' community of Dharwad and Belagavi districts for granting Scheduled Tribes status along with the existing 'Siddi' community of Uttar Kannada district will also be fulfilled.
- The persons belonging to "Parivara' and 'Talawara' communities as well as 'Siddi' community of Dharwad and Belagavi districts will be eligible to get the Scheduled Tribe certificate from the State of Karnataka and will also be eligible for all benefits meant for the Scheduled Tribes in the State.

3

THE NEW DELHI INTERNATIONAL ARBITRATION CENTRE ORDINANCE, 2019

Context:

- The Union Cabinet approved promulgation of an Ordinance for establishing the **New Delhi International Arbitration Centre (NDIAC)** for the purpose of creating an independent and autonomous regime for institutionalised arbitration.

About:

- The NDAIC shall be established with an aim to:**
 - To bring targeted reforms to develop itself as a flagship institution for conducting international and domestic arbitration.
 - Provide facilities and administrative assistance for conciliation mediation and arbitral proceedings;
 - Maintain panels of accredited arbitrators, conciliators and mediators both at national and international level or specialists such as surveyors and investigators;
 - Facilitate conducting of international and domestic arbitrations and conciliation in the most professional manner;
 - Provide cost effective and timely services for the conduct of arbitrations and conciliations at Domestic and International level;
 - Promote studies in the field of alternative dispute resolution and related matters, and to promote reforms in the system of settlement of disputes; and
 - Co-operate with other societies, institutions and organisations, national or international for promoting alternative dispute resolution.

4

FAST TRACK SPECIAL COURTS

Context:

- The Government of India enacted "**The Criminal (Law) Amendment Act, 2018**" through which amendments were effected in the Indian Penal Code, the Criminal Procedure Code, the Indian Evidence Act and The Protection of Children from Sexual Offences (POCSO) Act, 2012.

About:

- The Criminal Law (Amendment) Bill 2018 enhances the minimum sentence for offence of rape against girl children of all three age categories.
- Under new law, if the victim is under 12 years of age, the culprit faces minimum sentence of 20 years, up from 10 years previously. The maximum punishment is death penalty.
- In the cases of gangrape of child under 12, the minimum punishment is life sentence (earlier 20 years) while the maximum is death penalty.
- In cases of child aged between 12 and 16, the offence of rape is punishable with the minimum sentence of 20 years, up from 10 years. Maximum punishment in such cases is life imprisonment. If a girl aged between 12 and 16 is gangraped, the convict faces minimum punishment of life sentence.

5**COMPLIANCE OF GOOD SAMARITAN GUIDELINES****Context:**

- **Ministry of Road Transport and Highways** has issued guidelines in pursuance of order of Supreme Court of India to protect the **Good Samaritans** in case of road accidents.

Who is a Good Samaritan?

- A **Good Samaritan** is a bystander, who voluntarily comes forward to administer immediate assistance or emergency care to a person injured in an accident, or crash, or emergency medical condition, or emergency situation.
- On March 30, 2016, the Supreme Court of India gave "force of law" to the guidelines for the protection of Good Samaritans issued by the Ministry of Road Transport and Highways.
- In the last ten years, road crashes have killed over 13 lakh people in India. According to the Law Commission of India, 50% of these victims died of preventable injuries and could have been saved if they had received care on time.

Guidelines lay down for the Good Samaritans

- The Good Samaritans will be treated respectfully and without any discrimination on the ground of the gender, religion, nationality and cast.
- Any individual, except an eyewitness, who calls the police to inform of an accidental injury or death, need not reveal his or her personal details such as, full name, address, or the phone number.
- The police will not compel the Good Samaritans to disclose his/her name identity, address and other such details in the police record form or log register and in procuring information or anything else.
- The police will allow the Good Samaritans to leave after having provided the information available to him or her, and no further questions will be asked of him or her if he or she does not desire to be a witness.

6**NATIONAL INVESTIGATION AGENCY (AMENDMENT) BILL, 2019****Context:**

- The National Investigation Agency (Amendment) Bill, 2019 was unanimously passed by Rajya Sabha.

About:

- The Bill amends the National Investigation Agency (NIA) Act, 2008. The Act provides for a national-level agency to investigate and prosecute offences listed in a schedule (scheduled offences). Further, the Act allows for creation of Special Courts for the trial of scheduled offences.

- **Scheduled offences:** The schedule to the Act specifies a list of offences which are to be investigated and prosecuted by the NIA. These include offences under Acts such as the Atomic Energy Act, 1962, and the Unlawful Activities Prevention Act, 1967. The Bill seeks to allow the NIA to investigate the following offences, in addition: (i) human trafficking, (ii) offences related to counterfeit currency or bank notes, (iii) manufacture or sale of prohibited arms, (iv) cyber-terrorism, and (v) offences under the Explosive Substances Act, 1908.
- **Jurisdiction of the NIA:** The Act provides for the creation of the NIA to investigate and prosecute offences specified in the schedule. The officers of the NIA have the same powers as other police officers in relation to investigation of such offences, across India. The Bill states that in addition, officers of the NIA will have the power to investigate scheduled offences committed outside India, subject to international treaties and domestic laws of other countries.
- **Special Courts:** The Act allows the central government to constitute Special Courts for the trial of scheduled offences. The Bill amends this to state that the central government may designate Sessions Courts as Special Courts for the trial of scheduled offences.

7

THE PROTECTION OF HUMAN RIGHTS (AMENDMENT) BILL, 2019

Context:

- Parliament passed the **Protection of Human Rights (Amendment) Bill 2019** after the Rajya Sabha approved it unanimously on July 22, 2019.

About:

- The Protection of Human Rights (Amendment) Bill, 2019, inter alia, provides-
 - That a person who has been a Judge of the Supreme Court is also made eligible to be appointed as Chairperson of the Commission in addition to the person who has been the Chief Justice of India;
 - To increase the Members of the Commission from two to three of which, one shall be a woman;
 - To include Chairperson of the National Commission for Backward Classes, Chairperson of the National Commission for Protection of Child Rights and the Chief Commissioner for Persons with Disabilities as deemed Members of the Commission;
 - To reduce the term of the Chairperson and Members of the Commission and the State Commissions from five to three years and shall be eligible for re-appointment;
 - To provide that a person who has been a Judge of a High Court is also made eligible to be appointed as Chairperson of the State Commission in addition to the person who has been the Chief Justice of the High Court; and,
 - To confer upon State Commissions, the functions relating to human rights being discharged by the Union territories, other than the Union territory of Delhi, which will be dealt with by the Commission.

The National Human Rights Commission (NHRC)

- ▶ NHRC of India is a Statutory public body constituted on 12 October 1993 under the Protection of Human Rights Ordinance of 28 September 1993.
- ▶ It was given a statutory basis by the Protection of Human Rights Act, 1993.
- ▶ The NHRC is the National Human Rights Commission of India, responsible for the protection and promotion of human rights, defined by the Act as "Rights Relating To Life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the International Covenants.
- ▶ A Chairperson, should be retired Chief Justice of India.

8

THE RIGHT TO INFORMATION (AMENDMENT) BILL, 2019**Context:**

- RTI Amendment Bill passed By Parliament.

About:

- The Bill proposes to change the fixed term of the Information Commissioners, and make their pay and service conditions subject to the executive rules to be made by the government.
- At present, the Chief Information Commissioner and Information Commissioners have a fixed term of five years. The amendment bill changes the period of office of Chief Information Commissioner and Information Commissioner as "for such term as may be prescribed by the Central Government". In the same manner, the term of office of State Information Commissioners is curtailed by the amendment.
- Section 27 of the Act is amended to give rule making power to the Central Government to determine the pay, allowances and service conditions of Information Commissioner.
- This means that the tenure of the Information Commissioner can be fixed as per the executive rules framed by the Central Government.
- Further, the amendment gives power to the Central Government to fix the salary and allowances of Chief Information Commissioners and State Information Commissioners.

The Right to Information Act, 2005

- The Right to Information (RTI) Act, 2005 was passed by the Parliament in June 2005 and it came into force in October 2005.
- The RTI Act replaced Freedom of information Act, 2002 with an aim to provide for the setting up of a practical regime of the right to information for citizens.
- The RTI Act is a legal right of every Indian citizen.
- Under its provisions, any citizen of India may request information from a public authority and the authority will be required to reply within 30 days.
- The request for the information is submitted to the Central Public Information Officer or the State Public Information Officer.

9

THE CODE ON WAGES BILL, 2019**Context:**

- The government recently introduced the Code on Wages Bill in Lok Sabha.

About:

- The Bill aims to transform the old and obsolete labour laws into more accountable and transparent ones and seeks to pave the way for the introduction of minimum wages and labour reforms in the country.
- It regulates the wages and bonus payments in all employments where any industry, trade, business, or manufacturing is being carried out.
- The bill subsumes the following four labour laws:
 - The Payment of Wages Act, 1936
 - The Minimum Wages Act, 1948

- The Payment of Bonus Act, 1965
- The Equal Remuneration Act, 1976.
- It universalizes the provisions of minimum wages and timely payment of wages to all employees irrespective of the sector and wage ceiling and seeks to ensure "Right to Sustenance" for every worker and intends to increase the legislative protection of minimum wage.
- It has been ensured in the bill that employees getting monthly salary shall get the salary by 7th of next month, those working on a weekly basis shall get the salary on the last day of the week and daily wagers should get it on the same day.
- The provisions of the bill will apply to all the employees.
- At present, the provisions of both the Minimum Wages Act and Payment of Wages Act apply on workers below a particular wage ceiling working in Scheduled Employments only.
- Many unorganized sector workers like agricultural workers, painters, persons working in restaurants and dhabas, chowkidars, etc. who were out of the ambit of minimum wages will get legislative protection of minimum wages after the bill becomes an Act.
- The Central Government is empowered to fix the floor wages by taking into account the living standards of workers. It may set different floor wages for different geographical areas.
- The minimum wages decided by the central or state governments must be higher than the floor wage.

Implications:

- It seeks to reduce compliance costs for employers.
- It is expected to reduce litigation as it streamlines the definition of wages.
- It will substantially reduce the number of minimum wages in the country from the existing more than 2000 rates of minimum wages.
- This would ensure that every worker gets a minimum wage which will also be accompanied by an increase in the purchasing power of the worker thereby giving a fillip to growth in the economy.

10

CONSUMER PROTECTION BILL, 2019

Context:

- Recently, the Lok Sabha has passed the Consumer Protection Bill, 2019, which seeks to strengthen the consumer rights and provides a mechanism for redressal of complaints regarding defects in goods and deficiency in services.

About:

- Apart from setting up of authorities for timely and effective administration and settlement of consumer disputes, the bill also seeks to bring in e-commerce under their jurisdiction and hold celebrities accountable for false and misleading advertisements of products that they endorse.
- Apart from the consumer courts at the district, state and national level, the bill proposes a Central Consumer Protection Authority (CCPA) to promote, protect and enforce consumer rights as a class and protect them from unfair trade practices.
- CCPA, envisaged as a regulator, can file a class action suit if required and would take immediate action on any consumer complaint.
- The bill proposes strict action against the advertiser in case of misleading advertisements but not against the media through which the advertisement is being publicised.
- Celebrities can be fined up to Rs. 10 lakh. For repeat offences, this may rise to Rs. 50 lakh, with a jail term of up to five years

- It also provides for product liability action on account of harm caused to consumers due to defective products or deficient services.
- The Bill will replace the earlier Consumer Protection Act, 1986.

11

EMERGENCY RESPONSE SUPPORT SYSTEM (ERSS- DIAL 112), 'E-BEAT BOOK' SYSTEM AND 'E-SAATHI' APP

Context:

- Government launched Emergency Response Support System (ERSS- Dial 112), 'E-Beat Book' System and 'E-Saathi' App

About:

- Union Home Minister launched three citizen centric services in Chandigarh.
- The services include the Emergency Response Support System (ERSS - Dial 112), 'E-Beat Book' System and the 'E-Saathi App'.
- The beat officer system has been the cornerstone of the Indian Policing system for ages and through such Citizen Centric Services, a SMART Police force can be built in the country.
- ERSS is one of the key projects of the Union Ministry of Home Affairs under Nirbhaya Fund. It has been designed to play a pivotal role in mitigation or preventing escalation of crime, especially against women and children. ERSS provides a single emergency number (112), computer aided dispatch of field resources to the location of distress. Citizens can send their emergency information through call, sms, email and through the 112 India mobile app.

12

CPGRAMS REFORMS IN DEPARTMENT OF POSTS

Context:

- The Government launched CPGRAMS reforms in Department of Posts.

About:

- Centralized Public Grievance Redress And Monitoring System (CPGRAMS) is an online web-enabled system over NICNET developed by NIC, in association with Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG).
- CPGRAMS is the platform based on web technology which primarily aims to enable submission of grievances by the aggrieved citizens from anywhere and anytime (24x7) basis to Ministries/Departments/Organisations who scrutinize and take action for speedy and favorable redress of these grievances.
- Tracking grievances is also facilitated on this portal through the system generated unique registration number.

The upgraded version:

- The new upgraded version CPGRAMS 7.0 provides for grievances filed on CPGRAMS to be directly sent to field level grievance officers by providing user IDs to all field level functionaries.
- CPGRAMS Reforms has been a major thrust area for the Government and has been included in the 100 days agenda of the Department of Administrative Reforms and Public Grievances as also the Department of Posts.

- The Department of Posts is one of the largest recipients of Public Grievances in India.
- It is expected that the CPGRAMS 7.0 will cut processing time by 50 percent in the Department of Posts.
- The '**E-Beat Book**' is a web and mobile based application which will ease the collection, updation and analysis of the information related to crime and criminals in a real time.
- The '**E-Saathi**' App would help the general public, including senior citizens, to remain in touch with the police and also give suggestions to facilitate participative community policing('Your Police at Your Doorstep' initiative).

13

VOLUNTARY CODE OF ETHICS FOR SOCIAL MEDIA PLATFORMS

Context:

- Election Commission directed Voluntary Code of Ethics for Social Media Platforms during simultaneous elections in Maharashtra and Haryana.

About:

- The highlighted features of "Voluntary Code of Ethics" are as follows:
 - Social Media platforms will voluntarily undertake information, education and communication campaigns to build awareness including electoral laws and other related instructions.
 - Social Media platforms have created a high priority dedicated grievance redressal channel for taking expeditious action on the cases reported by the ECI.
 - Social Media Platforms and ECI have developed a notification mechanism by this ECI can notify the relevant platforms of potential violations of Section 126 of the R.P. Act, 1951 and other electoral laws.
 - Platforms will ensure that all political advertisements on their platforms are pre-certified from the Media Certification and Monitoring Committees as per the directions of Hon'ble Supreme Court.
 - Participating platforms are committed to facilitate transparency in paid political advertisements, including utilising their pre-existing labels/disclosure technology for such advertisements.

14

INDIA INNOVATION INDEX 2019

Context:

- NITI Aayog with Institute for Competitiveness as the knowledge partner released the **India Innovation Index (III) 2019**.

About:

- Karnataka is the most innovative major state in India.
- Tamil Nadu, Maharashtra, Telangana, Haryana, Kerala, Uttar Pradesh, West Bengal, Gujarat, and Andhra Pradesh form the remaining top ten major states respectively.
- The top ten major states are majorly concentrated in southern and western India.
- Sikkim and Delhi take the top spots among the north- eastern & hill states, and union territories/city states/ small states respectively.
- Delhi, Karnataka, Maharashtra, Tamil Nadu, Telangana, and Uttar Pradesh are the most efficient states in translating inputs into output.

15 NAGPUR RESOLUTION

Context

- The '**Nagpur Resolution- A holistic approach for empowering citizens**' was adopted during the Valedictory session of the two-day Regional Conference on 'Improving Public Service Delivery – Role of Governments', in Nagpur, Maharashtra.

Highlights

- The Resolution aims to achieve the following objectives:
 - To empower the citizens by policy interventions for better service delivery through timely updation of citizens charters, implementation of enactments and benchmarking standards for continuous improvement;
 - To empower citizens by adopting a bottom-up approach to bring massive improvements in quality of grievance redressal and reduction in timelines of grievance redressal;
 - To adopt a holistic approach of systemic public grievance reforms through improved mapping, formulation of monitoring matrix, data collection and evaluation in quality of grievance redressal;
 - To provide an enabling environment for States and Ministries/ Departments of the Government of India for creating web portals and to adopt a holistic approach for improved service delivery through digital platforms;
 - To focus on dynamic policy-making and strategic decisions, monitoring of implementation, the appointment of key personnel, coordination and evaluation;
 - To achieve a sense of common identity by the exchange of technical expertise in the areas of Improved Service Delivery between the paired States under the Ek Bharat – Shrestha Bharat Program;
 - To work towards long-term engagements in the areas of Improved Service Delivery for Empowering Citizens through greater cooperation between the DARPG and the participating States and,
 - To ensure timely publication of Good Governance Index to identify the quality of governance in 10 sectors especially those pertaining to welfare and infrastructure at the Union, State and District levels.

16 GOOD GOVERNANCE INDEX

Context:

- The government has launched the '**Good Governance Index**' on the occasion of Good Governance Day.

About the Index:

- The **Good Governance Day** is observed on the birth anniversary of former Prime Minister Shri Atal Bihari Vajpayee.
- The Good Governance Index is a uniform tool across the States to assess the Status of Governance and impact of various interventions taken up by the State Government and UTs.
- The objectives of GGI are to provide quantifiable data to compare the state of governance in all states and UTs, enable states and UTs to formulate and implement suitable strategies for improving governance and shift to result-oriented approaches and administration.

Key-findings of the index:

- The southern state of Tamil Nadu has bagged the top position in the composite ranking for good governance index (GGI), followed by Maharashtra and Karnataka.
- Chhattisgarh has got the fourth position, followed by Andhra Pradesh (fifth), Gujarat (sixth), Haryana (seventh) and Kerala at the eight ranks.

- The states and union territories have been divided into three groups -- big states, north-east and hill states, and union territories -- for the rankings based on certain indicators separately.
 - Madhya Pradesh is at the ninth rank, West Bengal at the tenth position, followed by Telangana (11th), Rajasthan (12th), Punjab (13th), Orissa (14th), Bihar (15th), Goa (16th), Uttar Pradesh (17th) and Jharkhand at eighteen positions in the big states category.
 - In the north-east and hill category, Himachal Pradesh has topped the ranking followed by Uttarakhand, Tripura, Mizoram, Sikkim, Assam, Jammu and Kashmir (now divided into two union territories of Jammu and Kashmir, and Ladakh), Manipur, Meghalaya, Nagaland and Arunachal Pradesh.
 - Among the union territories, Pondicherry has got the first position, followed by Chandigarh, Delhi, Daman and Diu, Andaman and Nicobar Islands, Dadra and Nagar Haveli and Lakshadweep.

17 E-OFFICE MISSION

Context:

- The government recently organised the National Workshop on 'e-office' in New Delhi to create a nation- wide momentum for the creation of e-Office across the State Secretariats.

What is e-office?

- E-office is one of the key initiatives in the area of e-Governance.
- The e-Office solution enables core operations of the Government at all levels to be performed in a virtual 'paperless' environment.
- This application is, thus, a major step in realizing the objective of an open and responsive Government.
- The Government intends to make all its Departments near paper-free in the near future.

About the mission:

- The e-Office Mission Mode Project (MMP) was launched in 2011-12 in a phased manner and current phase-III is under implementation.
- So far a total of 79 Ministries / Departments have been covered under this programme.
- Out of these 79, a total of 57 have achieved the target of 80%. At present, there are 1485584 active e-files in all Ministries/Departments.

18 NATIONAL TELECONSULTATION CENTRE (CONTEC)

Context:

- The government launched the National Teleconsultation Centre (CoNTeC).

What is CoNTeC?

- The project CoNTeC, an acronym for COVID-19 National Teleconsultation Centre, has been conceptualised by the Ministry of Health & Family Welfare and has been implemented by the All India Institute of Medical Sciences, New Delhi.
- It is a multi-modal telecommunications hub through which 2 way audio-video and text communications can be undertaken from any part of the country as well as the world at large.
- The modes of communication will include simple mobile telephony as well as two way video communications, using WhatsApp, Skype and Google Duo.

- The CoNTeC is also fully integrated with the National Medical College Network (NMCN) to conduct a full fledged Video Conference (VC) between the 50 Medical Colleges connected through the NMCN with its National Resource Centre located at SGPGI, Lucknow.
- CoNTeC has been made operational at AIIMS with a view to connect the Doctors across the country to AIIMS in real time for treatment of the COVID-19 patients.
- The Doctors would be available in the facility 24X7 and to keep it operational 24 hrs.

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4

पिब

**SOCIAL
JUSTICE**

1 INDIA INTERNATIONAL SKILL CENTRES

Context:

- The **India International Skill Centres (IISC)** program was launched as a pilot operational in 14 centres in the country. A total of 583 students were trained in these centres.

About:

- The IISCs at present and in the form of a future network model have the following as their focus:
 - Counseling and guidance along with Foreign Employment Support for employment opportunities in the overseas market
 - Information on the required skill set
 - Minimum wages etc. to the potential emigrants
 - Skill Testing & certification aligned with employer standards
 - Incremental skill training & Pre-Departure Orientation Training (PDOT)
 - To focus on emerging opportunities in all regions of the world

India International Skill Centers:

- India International Skill Centers shall be set up through the National Skill Development Corporation (NSDC) and shall impart training through the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Pravasi Kaushal Vikas Yojana (PKVY) to youth seeking global mobility for jobs.
- IISCs shall be state-of-the-art centers equipped with lab infrastructure to deliver International benchmarked training and certification programs.
- IISCs to be setup at the overseas migration pockets of the country for equipping trainees looking to migrate overseas
- Pre-Departure Orientation Training (PDOT) modules to be part of the trainings at IISCs which shall make the trainees adjust to the culture, language and environment of the migrating country as well as provide the necessary digital literacy skills
- IISCs shall look to develop placement linkages to international countries through direct tie ups with Employers or Recruitment Agents approved by the Ministry of External Affairs
- Post the successful completion of the assessments, candidates would be awarded a joint certification of the Indian Sector Skill Council and the International Awarding Organisation.

2 CHILD LABOUR

Context:

- As per information received from the **District Project Societies** set up under the **National Child Labour Project (NCLP) Scheme**, a total number of 320488 children were rescued from all forms of child labour, and were rehabilitated and mainstreamed to formal education system during the last five years.

Steps taken by Government:

- Child Labour is an outcome of various socio-economic problems such as poverty, economic backwardness and illiteracy.

- The Central Government has taken cognizance of the practice of child labour still going on in various parts of the country, in spite of a ban on it and is committed to eradicate the problem of child labour from all parts of the country.
- **Child Labour (Prohibition & Regulation) Amendment Act, 2016** provides for complete prohibition of work or employment of children **below 14 years** in any occupation and process and prohibition of adolescents in the age group of 14 to 18 years in hazardous occupations and processes.
- The Amendment Act also provides stricter punishment for employers for violation of the Act and has made the offence as cognizable.
- The Government is also implementing the **National Child Labour Project (NCLP) Scheme** since 1988 for **rehabilitation of child labour**.
- Under the NCLP Scheme, children in the age group of 9-14 years are enrolled in the NCLP Special Training Centres, where they are provided with bridge education, vocational training, mid-day meal, stipend, health care, etc. before being mainstreamed into formal education system.
- Children in the age group of 5-8 years are directly linked to the formal education system through a close coordination with the **Sarva Shiksha Abhiyan (SSA)**.
- To ensure effective enforcement of the provisions of the **Child Labour Act** and smooth implementation of the NCLP Scheme, a separate online portal **PENCIL** (Platform for Effective Enforcement for No Child Labour) has been launched on 26 September 2017.
- As per Section 2 (14) (ii) of **Juvenile Justice (Care and Protection of Children) act, 2015 (JJ Act)**, a child who is found living in contravention of labour laws for the time being in force is included as a 'child in need of care and protection', the JJ Act, 2015 mandates a security net of service delivery structures to provide institutional and non-institutional care to these children. The primary responsibility of execution of the Act, as such, lies with the State/UTs.
- Ministry of Women and Child Development is implementing '**Child Protection Services**' (CPS) (erstwhile Integrated Child Protection Scheme), for care, protection, rehabilitation and reintegration of children in difficult circumstances.
- Under CPS, financial assistance is provided to State Governments/UT Administrations, for, inter alia, undertaking a situational analysis of children in difficult circumstances, for setting up and maintenance of various types of Child Care Institutions (CCIs).

3

OPERATION THIRST

Context:

- RPF launched "Operation Thirst", an All India Drive to crack down selling of unauthorised Packaged Drinking Water.

About:

- Operation Thirst aims to curb the menace of unauthorized PDW (Packaged Drinking Water) in Railway premises.
- Almost all major stations over Indian Railway were covered during this operation.
- During the drive, 1371 persons were arrested for selling of packaged drinking water of unauthorised brands under different sections.

4

ECONOMICALLY WEAKER SECTIONS (EWS) BILL

Context:

- Articles 15(6) and 16(6) have been inserted in the Constitution, vide the Constitution (One Hundred and Third Amendment) Act, 2019.

About:

- Article 15(6):** Nothing in this article or sub-clause (g) of clause (1) of Article 19 or clause (2) of Article 29 shall prevent State from making:
 - any special provision for the advancement of any economically weaker sections of citizens other than the classes mentioned in clauses (4) and (5); and
 - any special provision for the advancement of any economically weaker sections of citizens other than the classes mentioned in clauses (4) and (5) in so far as such special provisions relate to their admissions to educational institutions including private educational institutions, whether aided or unaided by the State, other than the minority educational institutions referred to in clause (1) of Article 30, which in the case of reservation would be in addition to the existing reservations and subject to a maximum of ten per cent of the total seats in each category.
- Article 16(6):** Nothing in this article shall prevent the State from making any provision for the reservation of appointments or posts in favour of any economically weaker sections of citizens other than the classes mentioned in clause (4), in addition to the existing reservation and subject to a maximum of ten per cent of the posts in each category.

Impact:

- This enables the State to provide the benefits of reservation on preferential basis to the Economically Weaker Sections (EWSs) in civil posts and services in the Government of India and admission in Educational Institutions.
- Accordingly, the provision for 10% reservation to the EWS was implemented by the Government in January 2019.
- 10% reservation under EWS category is applicable to those persons who are not covered under the existing scheme of reservations for the Scheduled Castes, the Scheduled Tribes and the Socially and Educationally Backward Classes.
- Instructions have been issued by the Ministry of HRD for increasing the total number of seats over a period of two years, to provide for 10% EWS reservation, without adversely affecting the proportionate seats of SCs, STs and OBCs.

4

STRINGENT PUNISHMENT FOR SEXUAL CRIMES AGAINST CHILDREN

Context:

- Cabinet approves Amendment in the **Protection of Children from Sexual Offences (POCSO) Act 2012**.

About the act:

- The POCSO Act, 2012 was enacted to Protect the Children from Offences of Sexual Assault, Sexual harassment and pornography with due regard for safeguarding the interest and well-being of children. The act is gender neutral.

- The Act defines a child as any person below eighteen years of age, and regards the best interests and welfare of the child as matter of paramount importance at every stage, to ensure the healthy physical, emotional, intellectual and social development of the child.

Amendments:

- The Act will make punishment more stringent for committing sexual crimes against children including death penalty.
- The amendments also provide for levy of fines and imprisonment to curb child pornography.

Expected Outcome:

- The amendment is expected to discourage the trend of child sexual abuse by acting as a deterrent due to strong penal provisions incorporated in the Act.
- It intends to protect the interest of vulnerable children in times of distress and ensures their safety and dignity.
- The amendment is aimed to establish clarity regarding the aspects of child abuse and punishment thereof.

5

THE TRANSGENDER PERSONS BILL 2019

Context:

- The Union Cabinet has approved the proposal to introduce The Transgender Persons (Protection of Rights) Bill, 2019.

Background:

- Transgender community is among one of the most marginalized communities in the country because they don't fit into the stereotypical categories of gender of 'men' or 'women'.
- Consequently, they face problems ranging from social exclusion to discrimination, lack of education facilities, unemployment, lack of medical facilities and so on.
- The Bill shall empower the transgender community socially, educationally and economically.

Impact:

- It will benefit a large number of transgender persons, mitigate the stigma, discrimination and abuse against this marginalized section and bring them into the mainstream of society.
- This will lead to inclusiveness and will make the transgender persons productive members of the society.

6

COMPREHENSIVE LEGISLATION ON CHILD ABUSE

Context:

- The Ministry of Women and Child Development has drafted the Trafficking of Persons (Prevention, Protection and Rehabilitation) Bill, 2018 as a comprehensive legislation to deal with issues of various aspects of trafficking of persons including trafficking of children.

About:

- The Bill aims to prevent trafficking of persons, to provide care, protection and rehabilitation to the victims of trafficking, to prosecute offenders and for matters connected therewith or incidental thereto.
- The bill was passed by the 16th Lok Sabha but could not be considered in the Rajya Sabha. Hence, it lapsed. Now the government has taken it up.
- The bill relates to issues of sexual exploitation etc. only in the context of those victims, who may also be children, who have been trafficked.

7

SWACHHTA PAKHWADA

- The Delhi Postal Circle has observed the year-long cleanliness drive, "**Swachhta Pakhwada**", as part of Swachh Bharat Abhiyan of the Government of India from November 16, 2019 to November 30, 2019.

What is Swachhata Pakhwada?

- Swachhata Pakhwada started in April 2016 with the objective of bringing a fortnight of intense focus on the issues and practices of Swachhata by engaging GOI Ministries/Departments in their jurisdictions.
- An annual calendar is pre-circulated among the Ministries to help them plan for the Pakhwada activities

5

पिब

WOMEN

1

NEW POLICY FOR WOMEN EMPOWERMENT

Context:

- The Ministry of Women and Child Development has prepared the draft National Policy for Women after considering suggestions/comments received from stakeholders.

About:

- The Draft envisions a society in which, women attain their full potential and are able to participate as equal partners in all spheres of life.
- The draft policy addresses the diverse needs of women through identified priority areas :
 - Health including food security and nutrition,
 - Education,
 - Economy (including agriculture industry, labour, employment, NRI women, soft power, service sector, science and technology), Violence against women,
 - Governance and decision making
 - Violence Against Women
 - Enabling environment (including housing, shelter and infrastructure, drinking water and sanitation, media and culture, sports and social security)
 - Environment and climate change.

2

SWADHAR GREH SCHEME

Context:

- The **Ministry of Women and Child Development** is implementing the **Swadhar Greh Scheme** for rehabilitation of women in difficult circumstances.

About the scheme:

- The scheme covers women who are deserted and without any social and economic support, women victims of domestic violence, family tension and natural disaster.
- Besides the above, Ministry is also implementing **Universalisation of Women Helpline Scheme** which is envisaged to provide 24 hours emergency and non-emergency response to women affected by violence, both in public and private spaces by linking them with appropriate authorities such as police, One Stop Centres, hospital and legal services.
- Under the '**One Stop Centre Scheme**', One Stop Centres for violence affected women across the country as part of the **Nirbhaya Framework**, are established with the help of States/UTs for providing legal and psycho-social counselling along with other facilities including temporary shelter, police facilitation and medical support to the women needing the same under one roof in an integrated manner.

3

MUSLIM WOMEN (PROTECTION OF RIGHTS ON MARRIAGE) BILL 2019

Context:

- Parliament passed the **Muslim Women (Protection of Rights on Marriage) Bill 2019** or Triple Talaq Bill after it was approved by Rajya Sabha.

Salient Features of Bill:

- Triple Talaq Bill aims to declare practice of instant triple talaq void and illegal by making it cognizable penal offence. The salient features of the Bill are as follow
 - Objective:** Protect rights of married Muslim women and ensure gender equality and gender justice to Muslim women by declaring practice of triple talaq as void and illegal i.e. not enforceable in law and prevent divorce by practice of 'talaq-e-biddat' by their husbands.
 - Definitions:** It defines talaq or any other similar form of talaq pronounced by Muslim man resulting in instant and irrevocable divorce. It defines Talaq-e-biddat as practice under Muslim personal laws, as pronouncement of word 'talaq' by Muslim husband thrice in one sitting to his wife, resulting in instant and irrevocable divorce
 - Offence and Penalty:** It makes this offence punishable with imprisonment up to 3 years and fine. It also makes all declaration of talaq, including in written or electronic form (email, text message etc) to be void and illegal.
 - It proposes to make offence cognizable, if information relating to commission of an offence is given to police officer by married Muslim woman upon whom talaq is pronounced or by any person related to her by blood/marriage.
 - It makes offence compoundable with permission of Magistrate at the instance of the married Muslim woman upon whom talaq is pronounced. It further provides for hearing married Muslim woman upon whom talaq is pronounced, before accused is released on bail by Magistrate.
 - Allowance:** It also provides for payment of subsistence allowance (to be determined by Magistrate) to married Muslim women against whom talaq has been declared and dependent children. The amount of allowance will be determined by Magistrate.
 - Custody:** It entitles Muslim woman against whom such talaq has been declared to seek custody of her minor children. In this case, Magistrate is empowered to determine manner of custody.

4

THE FOURTH EDITION OF WOMEN TRANSFORMING INDIA AWARDS

Context:

- The NITI Aayog launched the Fourth Edition of **Women Transforming India (WTI) Awards**.

About:

- The Women Transforming India (WTI) Awards is being organized in collaboration with the United Nations to recognize women entrepreneurs from across India. This year's theme is '**Women and Entrepreneurship**', in continuation of the theme for WTI Awards 2018.
- Nominations for the awards will be opened immediately after the launch. WhatsApp has collaborated with NITI Aayog for WTI Awards 2019 and will be providing support amounting to US\$100,000 to the award winners.

- The Women Entrepreneurship Platform (WEP) is a Government of India initiative by NITI Aayog to promote and support aspiring as well as established women entrepreneurs in India, assist and handhold them in their journey from starting to scaling up and expanding their ventures.

5 POSHAN MAAH EVENT

Context:

- The Ministry of Women and Child Development (WCD) organized **Poshan Maah** event in New Delhi.

About:

- The month of September is celebrated and observed as Rashtriya POSHAN maah. The activities in the POSHAN maah are focussed on Social Behavioural Change and Counselling (SBCC).
- The broad themes are: antenatal care, optimal breastfeeding (early and exclusive), complementary feeding, anaemia, growth monitoring, girls' education, diet, right age of marriage, hygiene, and sanitation, eating healthy and food fortification.
- The Ministry of WCD, as part of the POSHAN maah, reached out to all employees and visitors to create awareness regarding simple solutions to Anaemia and Diarrhoea.
- Ministry of WCD inaugurated the Test, Treat and Talk (T 3) Anaemia and Defeat Diarrhoea (D 2) camp in New Delhi.
- The Anaemia, Test, Treat and Talk will give the haemoglobin status and also offer counselling services on the prevention and control of Anaemia. The use of ORS and zinc tablets for Diarrhoea control and counselling services on the prevention and control of Diarrhoea are being offered at the camp.

6 FAST TRACK SPECIAL COURTS TO BE SET UP FOR SPEEDY DISPOSAL OF RAPE AND POCSO ACT CASES:

Context:

- The Government is gearing for setting Fast Track Special Courts for Speedy Disposal of Rape and POCSO Act cases, as a part of **National Mission for Safety of Women (NMSW)**.

Background:

- Incidents of rape and gang rape of minor girls below the age of twelve years and similar heinous crimes against women have shaken the conscience of the entire nation.
- Therefore, the offences of rape and gang rape of women and children require effective deterrence through fast and time-bound completion of the trial relating to sexual offences.
- To bring out more stringent provisions and expeditious trial and disposal of such cases, the Union of India enacted the **Criminal Law (Amendment) Act, 2018**.
- Accordingly, the Central Government has started a scheme for setting up of 1023 FTSCs across the country based on the pendency of subject cases obtained from various High Courts (1,66,882 numbers as on 31.03.2018) for time-bound trial and disposal of pending cases related to rape and POCSO Act.

7

NATIONAL MISSION FOR SAFETY OF WOMEN (NMSW):

- The National Mission for Safety of Women (NMSW) covers all aspects from free medical care to legal aid to the victims of sexual assault by engaging public prosecutors in states and setting up of fast track courts.
- Out of total 31 States and UTs, so far, 24 have joined this scheme (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, NCT of Delhi, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura, UT of Chandigarh, Uttarakhand and Uttar Pradesh) for setting up of 792 numbers of FTSCs/ including 354 exclusive POCSO courts.

8

IMPLEMENTATION OF CENTRALLY SPONSORED SCHEMES**Context:**

- The Ministry of Women and Child Development is implementing two Centrally Sponsored Umbrella schemes – **Umbrella ICDS (Integrated Child Development Services)** and **Mission for Empowerment and Protection for Women** across the country.

About:■ **Umbrella ICDS:**

- The **Anganwadi Services Scheme** is a unique programme for early childhood care and development. It offers a package of six services, viz. Supplementary Nutrition, Pre-School Non-Formal Education, Nutrition and Health Education, Immunization, Health Check-Up and Referral Services. The beneficiaries under the Scheme are children in the age group of 0-6 years, pregnant women and lactating mothers.
- **Poshan Abhiyaan** (National Nutrition Mission) targets to reduce the level of stunting, under-nutrition, anemia and low birth weight babies by reducing mal-nutrition/under nutrition, anemia among young children as also, focus on adolescent girls, pregnant women and lactating mothers.
- **Pradhan Mantri Matru Vandana Yojana (PMMVY)** scheme provides cash incentive amounting to Rs.5,000 in three installments directly to the Bank/Post Office Account of Pregnant Women and Lactating Mother (PW&LM) in DBT (Direct Benefit Transfer) Mode during pregnancy and lactation in response to individual fulfilling specific conditions.
- Scheme for **Adolescent Girls** aims at out of school girls in the age group 11-14, to empower and improve their social status through nutrition, life skills and home skills. The scheme has nutritional and non-nutritional components which include nutrition; iron and folic acid supplementation; health check-up and referral service; nutrition and health education; mainstreaming out of school girls to join formal schooling bridge course/ skill training; life skill education, home management etc.; counselling/ guidance on accessing public services.
- **National Creche Scheme** provides day care facilities to children of age group of 6 months to 6 years of working women. The facilities are provided for seven and half hours a day for 26 days in a month. Children are provided with supplementary nutrition, early childcare education, and health and sleeping facilities.
- Child Protection Services Scheme aims to contribute to the improvement and the well-being of children in difficult circumstances, as well as, reduction of vulnerabilities to situation and actions that leads to abuse, neglect, exploitation, abandonment and separation of children from parent. The Scheme aims to spread awareness regarding the ways and means to prevent all children from child abuse of any kind including child sexual abuse.

■ Mission for Empowerment and Protection for Women

- **Mahila Shakti Kendra scheme** empowers rural women through community participation by involvement of Student Volunteers. The scheme is envisaged to work at various levels and at the national and state level technical support to the respective government on issues related to women is provided.
- **Swadhar Greh scheme** targets the women victims of unfortunate circumstances who are in need of institutional support for rehabilitation so that they could lead their life with dignity.
- **Ujjawala** is a comprehensive scheme to combat trafficking with the objective to prevent trafficking of women and children for commercial sexual exploitation, to facilitate rescue victims and placing them in safe custody, to provide rehabilitation services by providing basic amenities/needs, to facilitate reintegration of victims into the family and society, to facilitate repatriation of cross border victims.
- **Working Women Hostel** aims at providing safe and affordable accommodation to working women. These hostels have Day care facility for the children of inmates too. The Ministry provides financial support for establishing such hostels by NGOs or State Governments.
- **Beti Bachao Beti Padhao (BBBP)** scheme is a tri-ministerial initiative of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development with a focus on awareness and advocacy campaign for changing mindsets, multi-sectoral action in select districts, enabling girls' education and effective enforcement of Pre-Conception & Pre Natal Diagnostic Techniques (PC&PNDT) Act. The specific objectives of the scheme is to address declining Child Sex Ratio (CSR) by preventing gender biased sex selective elimination; ensuring survival and protection of the girl child and ensuring education and participation of the girl child.
- **One Stop Centre (OSC)** facilitates access to an integrated range of services including police, medical, legal, psychological support and temporary shelter to women affected by violence. The Scheme is funded through Nirbhaya Fund.
- **Women Helpline** – The Scheme is being implemented since 1st April, 2015 to provide 24 hours emergency and non-emergency response to women affected by violence through referral and information about women related government schemes/programmes across the country through a single uniform number (181).
- **Mahila Police Volunteers (MPVs)** Scheme is implemented by the Ministry of Women and Child Development in collaboration with the Ministry of Home Affairs. It envisages engagement of Mahila Police Volunteers in States/UTs who act as a link between police and community and facilitates women in distress.

6

पिब

EDUCATON

1

SCHEME FOR TRANS-DISCIPLINARY RESEARCH FOR INDIA'S DEVELOPING ECONOMY' (STRIDE)

Context:

- **University Grants Commission (UGC)** has approved 'Scheme for Trans-disciplinary Research for India's Developing Economy' (STRIDE).

What is STRIDE?

- STRIDE aims to boost research culture and innovation in colleges and universities, that will help students and faculty to contribute towards India's developing economy with collaborative research.
- The scheme will provide an opportunity to build multi-sectoral linkages between university-government- community-industry for national development and wellbeing of people.
- To encourage high quality high impact research in humanities, there is a provision to identify experts and invite them to develop a proposal.

STRIDE Objectives

- To identify young talent, strengthen research culture, build capacity, promote innovation and support trans-disciplinary research for India's developing economy and national development
- To fund multi-institutional network high-impact research projects in humanities and human sciences.

STRIDE Components:

- **Component-1**
 - It will endeavour to identify the motivated young talents with research and innovation aptitude in universities and colleges.
 - The scheme will provide research capacity building in diverse disciplines by mentoring, nurturing and supporting young talents to innovate pragmatic solutions for local, regional, national and global problems.
 - This component is open to all disciplines for grant upto 1 crore.
- **Component-2**
 - It will be mainly to enhance problem-solving skills with the help of social innovation and action research to improve the wellbeing of people and contribute to India's developing economy.
 - Collaborations between universities, government, voluntary organizations, and industries are encouraged under this scheme.
 - This component is open to all disciplines for grant upto 50 lakh – 1 crore.
- **Component-3**
 - It will fund high impact research projects in the identified thrust areas in humanities and human sciences through a national network of eminent scientists from leading institutions.
 - Disciplines eligible for funding under this component include philosophy, history, archaeology, anthropology, psychology, liberal arts, linguistics, Indian languages and culture, Indian knowledge systems, law, education, journalism, mass communication, commerce, management, environment and sustainable development.
 - Grant available for this component is upto 1 crore for one HEI and upto 5 crores for multi institutional network.

2

NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT (NAHEP)

Context:

- The ICAR has recently launched an ambitious **National Agricultural Higher Education Project (NAHEP)**.

About:

- The National Agricultural Higher Education Project has been formulated by the ICAR in partnership with the World Bank with a focus to improve and sustain quality of higher education in agriculture.
- The project has been launched for a period of four years with 50:50 cost sharing basis with the World Bank.
- The objective of the National Agricultural Higher Education Project for India is to support participating agricultural universities and ICAR in providing more relevant and higher quality education to Agricultural University students.
- There are three components to the project:
 - First** component is support to agricultural universities. This component will finance investments by participating AUs to improve the quality and relevance of agricultural education and research toward agricultural transformation.
 - Second** component-Investments in ICAR for Leadership in Agricultural Higher Education.
 - Third** component-Project Management and Learning.

3

SAMAGRA SHIKSHA

Context:

- The Central Government has launched an Integrated Scheme for school education - **Samagra Shiksha**.

About:

- Samagra Shiksha - an overarching programme for the school education sector extending from pre-school to class 12 has been, therefore, prepared with the broader goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes.
- The scheme subsumes the three erstwhile Centrally Sponsored Schemes of Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education, from the year 2018-19.
- Under the Centrally Sponsored Scheme of Samagra Shiksha, Information & Communication Technology (ICT) component envisages covering all Government and Government Aided schools from classes VI to XII, subject to the availability of budgetary provision, progress of approved interventions and receipt of proposals from the States/UTs.

Various initiatives taken by the government for providing education through digital means:

- ICT in Education Curriculum for School System** - ICT curriculum for teachers and students has been developed by NCERT. Students' curriculum was piloted in 588 Navodaya Vidyalayas for one year. 805 MRPs/ KRP of thirty states were oriented on roll-out of ICT curriculum for students and teachers in the respective states.
- e-pathshala** -It has been developed by NCERT for showcasing and disseminating all educational e-resources including textbooks, audio, video, periodicals and a variety of other print and non-print

materials.

- **National Repository of Open Educational Resources (NROER)** - It is an initiative to bring together all digital and digitisable resources across all stages of school education and teacher education.
- **SWAYAM:-** The 'Study Webs of Active Learning for Young Aspiring Minds' (SWAYAM) is an integrated platform for online courses, using Information and Communication Technology (ICT) and covering school (9th to 12th) to Post Graduate Level. It offers online courses for students, teachers and teacher educators.
- **SWAYAM PRABHA:-** A programme for utilization of satellite communication technologies for transmission of educational e-contents through 32 National Channels i.e. SWAYAM PRABHA DTH-TV has been launched
- **CBSE initiatives: - SARANSH** is a tool for comprehensive self review and analysis for CBSE affiliated schools and parents. It enables them to analyse students' performance in order to take remedial measures. SARANSH brings schools, teachers and parents closer, so that they can monitor the progress of students and help them improve their performance. It helps schools to compare their performance vis-à-vis all CBSE schools at various levels and also helps parents to compare their ward's performance within school State, Region and National level.
- **KVS initiatives:-** ICT Skills are imparted in all the Kendriya Vidyalayas to the students of classes III to XII. 12011 e-Classrooms (9711 e-Classrooms established and 2300 under process) have been established in Kendriya Vidyalayas throughout the country for facilitating effective learning through digital mode.
- **Operation Digital Board:-** An initiative has been taken by Government of India to provide interactive digital boards to nearly 15 lakh classrooms across the country for 9th standard to post graduate level, where they can receive lectures from best teachers/professors and access quality e-content, in order to enhance overall learning process and experience of the students.

4

PROGRAMME FOR INTERNATIONAL STUDENTS ASSESSMENT (PISA)

Context:

- The Union Cabinet approved the Agreement between India and the Organization for Economic Cooperation and Development (OECD) for participating in the Programme for International Students Assessment (PISA), which will be conducted by the OECD in 2021.

About:

- PISA is a competency-based assessment which unlike content-based assessment, measures the extent to which students have acquired key competencies that are essential for full participation in modern societies.
- It would lead to recognition and acceptability of Indian students and prepare them for the global economy in the 21st century. The CBSE and the NCERT will be part of the process and activities leading to the actual test.

Benefits:

- Learning's from participation in PISA will help to introduce competency-based examination reforms in the school system and help move away from rote learning. The Central Board of Secondary Education (CBSE) and the National Council for Educational Research and Training (NCERT) will be part of the process and activities leading to the actual test.

Salient features:

- Schools run by the Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS) and schools in the Union Territory of Chandigarh will participate.
- More than 80 countries, including 44 middle-income countries including Brazil, China, Thailand, Indonesia, Malaysia and Vietnam have participated in PISA.

The Organisation for Economic Co-operation and Development (OECD)

- It is an intergovernmental economic organisation with 36 member countries, founded in **1961** to stimulate economic progress and world trade.
- Most OECD members are high-income economies with a very high Human Development Index (HDI) and are regarded as developed countries.
- The OECD's headquarters are at the Chateau de la Muette in Paris, France. The OECD is funded by contributions from member states at varying rates.

5

THE SCHEME FOR HIGHER EDUCATION YOUTH IN APPRENTICESHIP AND SKILLS (SHREYAS)

Context:

- The Government launched the **Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS)** for providing industry apprenticeship opportunities to the general graduates exiting in April 2019 through the National Apprenticeship Promotional Scheme (NAPS).

About:

- The program aims to enhance the employability of Indian youth by providing 'on the job work exposure' and earning of stipend.
- SHREYAS focussed towards students primarily from non-technical courses will introduce employable skills into their learning, promote apprenticeship as integral to education and also amalgamate employment facilitating efforts of the government into the education system.
- It will provide a platform wherein educational institutions and industry would log in and provide their respective demand and supply of apprenticeship.
- It is a major effort in the direction to make degree students more skilled, capable, and employable and aligned to the needs of our economy so that they contribute to country's progress and also obtain gainful employment.

Objective:

- To improve employability of students by introducing employment relevance.
- To forge a close functional link between education and industry.
- To provide skills to the students in a dynamic manner.
- To establish an 'earn while you learn' system into higher education.
- To help industry in securing good quality manpower.
- To link student community with employment facilitating efforts of the Government.

National Apprenticeship Promotion Scheme (NAPS)

- ▶ NAPS is implemented by Director General of Training (DGT) under the aegis of Union Ministry of Skill Development and Entrepreneurship (MSDE).
- ▶ Under it, Central Government for the first time will provide financial incentives to the employers to engage actively in apprenticeship training.
- ▶ Central Government will also directly share 25% of the total stipend (maximum of 1,500 rupees per month per apprentice) payable to an apprentice with employers.
- ▶ In addition, it will support basic training which is considered an essential component of apprenticeship training.
- ▶ The Central Government will bear the 50% of the total expenditure incurred on providing basic training to an apprentice.
- ▶ All transactions including registration by employers, apprentices, registration of contract and payment to employers will be made in online mode.

6

THE CENTRAL EDUCATIONAL INSTITUTIONS (RESERVATION IN TEACHERS' CADRE) BILL, 2019

Context:

- Giving a major push to the reforms in Education sector, making it inclusive and keeping in mind the aspirations of the people from different categories, the Union Cabinet, chaired by the Prime Minister, has approved the introduction of a Bill namely "The Central Educational Institutions (Reservation in Teachers' Cadre) Bill, 2019".
- The Cabinet decision will address the long standing demands of persons belonging to SCs/STs/SEBCs and ensure their rights envisaged under the Constitution. It will also ensure providing of 10% reservation to EWS.

Impact:

- This decision will:
 - Allow filling up of more than 7000 existing vacancies by direct recruitment in Teachers' Cadre with 200 point roster. Ensure compliance of the Constitutional Provisions of Articles 14, 16 and 21.
 - Ensure full representation of Scheduled Castes/ Scheduled Tribes Socially and Educationally Backward Classes and Economically Weaker Sections in direct recruitment in teachers' cadres.
 - Expected to improve the teaching standards in the higher educational institutions by attracting all eligible talented candidates belonging to SCs/STs/SEBCs/EWS.

7

RASHTRIYA AVISHKAR ABHIYAN (RAA)

Context:

- Rashtriya Avishkar Abhiyan (RAA) was launched by Late Dr. A.P.J. Abdul Kalam, Former President of India.

About RAA:

- Rashtriya Avishkar Abhiyan (RAA) is a unique concept developed by the **Ministry of Human Resource Development (MHRD)**.

- It is a convergent framework across **School Education and Higher Education** to motivate children of the age group from 6-18 years both through inside and outside classroom activities and processes.
- It seeks to create curiosity, excitement and **spirit of innovation and exploration** amongst school children by encouraging higher education institutions assist secondary and elementary schools in the study of **Science and Mathematics**.
- Major interventions under RAA provided under Integrated scheme for School Education – **Samagra Shiksha**, include conduct of Science Exhibition, Book Fair, etc.
- It is an effort to take forward the Prime Minister's vision of Digital India, 'Make in India' and 'Teach in India'.

Digital Platforms by MHRD

- ▶ **Shodhganga:** It is a digital repository for research scholars across Universities and Institutes to deposit, re-use & share their Theses & Dissertations in digital formats including scanned documents. It is in open access to the world-wide academic community.
- ▶ **Shodhgangotri:** Under this initiative, research scholars / research supervisors in universities could deposit an electronic version of approved synopsis submitted by research scholars to the universities for registering themselves under the Ph.D. programme.
- ▶ **National Digital Library (NDL):** It aims to collect, preserve and disseminate entire intellectual output of our country and provide online access from school level to postgraduate level, including technical education.

8

SHAGUN - INTEGRATED ONLINE JUNCTION FOR SCHOOL EDUCATION

Context:

- The Government launched Integrated Online junction for School Education 'Shagun'.

About:

- Shagun is one of world's largest Integrated Online Junction for – School Education.
- It is an over-arching initiative to improve school education system by creating a junction for all online portals and websites relating to various activities of the Department of School Education and Literacy in the Government of India and all States and Union Territories.
- The portal seeks to connect approximately 92 lakh teachers and 26 crore students. He added that the website provides a very robust feedback mechanism. Common people can directly give their feedback about schools which will further increase the public participation and will ensure accountability and transparency.
- The single source of information will immensely benefit all the stakeholders, viz. the parents and the general public, the heads of the schools, the teachers, the students, the policy makers, the officials and the researchers.
- It provides vital information relating to availability of nearby schools, navigable distance vis-a-vis aerial distance between schools thereby helping the policy makers in taking informed decisions.

The main focus will be on the following areas:

- Reinforcing and cleaning the data of the Integrated Online Junction through feedback from Stakeholders
- Ensuring full inter-operability among the websites, portals and applications which are already hosted in the junction

- Creating high quality e-contents, including quizzes and puzzles to enhance learning and also for teachers in aiding classroom transactions
- Using artificial intelligence and deep machine learning in a variety of ways to enhance the quality of school education including for designing evidence based inventions.

9

NISHTHA

Context:

- The government launched the National Mission to improve Learning Outcomes at the Elementary level, NISHTHA.

About:

- National Initiative for School Heads and Teachers Holistic Advancement, NISHTHA is the world's largest teachers' training programme of its kind in the world.
- NISHTHA Website, Training Modules, Primer Booklet and a Mobile App were also launched.
- **Objective:** to motivate and equip teachers to encourage and foster critical thinking in students.
- This integrated programme aims to build the capacities of around 42 lakh participants covering all teachers and Heads of Schools at the elementary level in all Government schools, faculty members of State Councils of Educational Research and Training (SCERTs), District Institutes of Education and Training (DIETs) as well as Block Resource Coordinators and Cluster Resource Coordinators in all States and UTs.
- The prominent features of this integrated programme are activity based modules including educational games and quizzes, Social-emotional learning, motivational interactions, team building, preparation for school based assessment, in-built continuous feedback mechanism, online monitoring and support system, training need and impact analysis (Pre and Post training).

10

INSTITUTIONS OF EMINENCE (IOE) SCHEME

Context:

- The Ministry of Human Resource Development, on the advice of UGC and the Empowered Expert Committee issued orders to 5 public Universities conveying their declaration as Institutions of Eminence (IoE).

Ministry/Agency: The Ministry of HRD

About:

- The institutes included are **IIT Madras, Banaras Hindu University, IIT Kharagpur, University of Delhi and University of Hyderabad.**
- Earlier, in the first round under the IoE scheme, **6 institutions** were selected as IoEs:

Public Category	Private Category
Indian Institute of Science (IISc), Bangalore	Manipal Academy of Higher Education (MAHE), Manipal

Indian Institute of Technology (IIT), Delhi	Birla Institute of Technology & Sciences (BITS), Pilani
Indian Institute of Technology (IIT), Bombay	Jio Institute under the Greenfield category.

Benefits of Institutions of Eminence:

- Government Institutions to get additional funding upto 1000 Cr.
- The selected Institutions under IoE shall have **complete academic and administrative autonomy**.
- The Institutions of Eminence will have **complete financial autonomy** to spend the resources raised and allocated, subject to general conditions & restrictions of the Statutes and GFR.
- Academic collaborations with foreign higher educational institutions be **exempt from government approvals**. (in top 500) would
- **Freedom to hire personnel from industry**, etc, as faculty who are experts in their areas but may not have the requisite higher academic qualifications.
- Freedom to recruit faculty from outside India institution). (limit of **25%** of its faculty strength for public
- **Freedom to enter into academic collaborations** with other Institutions within the country.
- Freedom to have **own transparent merit based system** for admission of students.
- Freedom to **admit additionally foreign students** on merit subject to a maximum of **30%** of the strength of admitted domestic students.
- Freedom to **fix and charge fees from foreign students** without restriction.
- Freedom to determine the domestic student fees, subject to the condition that no student who gets selected admission is turned away for lack of finance. Every Institute to encourage scholarships and extension of loans facility.
- Freedom to **offer courses within a program as well as to offer degrees in newer areas, including inter-disciplinary ones**, after approval of its Governing Council and conforming to the minimum prevailing standards.
- Freedom to have the **flexibility of course structure** in terms of number of credit hours and years to take a degree, after approval of their Governing Council and conforming to the minimum prevailing standards.
- Flexibility in **fixing of curriculum and syllabus, with no UGC mandated curriculum structure**.
- Freedom to **offer online courses as part of their programmes with a restriction that not more than 20% of the programme** should be in online mode. Certificate courses can entirely be through online mode.
- Students enrolment capacity to be 10,000 in 15 years. (Lower figure permitted with justification)
- Faculty Student Ratio should be 1:20 at the time of Notification and should increase to 1:10 in five years.
- UGC Inspection shall not apply to Institutions of Eminence.

11

NATIONAL EDUCATIONAL ALLIANCE FOR TECHNOLOGY (NEAT) SCHEME

Context:

- Ministry of HRD announces National Educational Alliance for Technology (NEAT) Scheme for better learning outcomes in Higher Education

About:

- The National Educational Alliance for Technology (NEAT) is for using technology for better learning outcomes in Higher Education.
- The objective is to use Artificial Intelligence to make learning more personalised and customised as per the requirements of the learner.
- This requires development of technologies in Adaptive Learning to address the diversity of learners. There are a number of start-up companies developing this and MHRD would like to recognise such efforts and bring them under a common platform so that learners can access it easily. Educating the youth is a National effort and MHRD proposes to create a National Alliance with such technology developing EdTech Companies through a PPP model.
- MHRD would act as a facilitator to ensure that the solutions are freely available to a large number of economically backward students.
- MHRD would create and maintain a National NEAT platform that would provide one-stop access to these technological solutions.
- EdTech companies would be responsible for developing solutions and manage registration of learners through the NEAT portal. They would be free to charge fees as per their policy. As their contribution towards the National cause, they would have to offer free coupons to the extent of 25% of the total registrations for their solution through NEAT portal.

12

STEPS TAKEN BY GOVERNMENT TO ENSURE QUALITY EDUCATION FOR CHILDREN OF WEAKER SECTION AND DISADVANTAGED GROUP IN THE COUNTRY

Below is the list of important measures taken by government to ensure quality education for children of weaker section & disadvantaged group in the country:

- **RTE Act:** The Right of Children to Free and Compulsory Education (RTE) Act, 2009, entitles every child of age 6 to 14 years to a right to free and compulsory education in a neighbourhood school till completion of elementary education.
- Section 8(c) of the RTE Act, 2009 provides that the appropriate government would ensure that the child belonging to weaker section and the child belonging to disadvantaged group are not discriminated against and prevented from pursuing and completing elementary education on any grounds.
- Further, Section 12 (1) (c) of RTE Act, 2009 provides that all specified category schools and unaided schools shall admit at least 25% children belonging to weaker section and disadvantaged group in the neighbourhood in class I and provide free and compulsory elementary education till its completion.
- **Samagra Shiksha:** Samagra Shiksha, an overarching programme for the school education sector extending from pre-school to class XII, aims to ensure inclusive and equitable quality education at all levels of school education.
- **Navodaya Vidyalaya Scheme:** The Navodaya Vidyalaya Scheme provides for opening of one JNV in each district of the country to bring out the best of rural talent. Its significance lies in the selection of talented rural children as the target group and the aim to provide them quality education comparable to the best in a residential school system.

13**WORLD BRAILLE DAY**

- All India Radio News and its regional units in Pune and Nagpur have observed World Braille Day in an innovative way by broadcasting news read by Visually impaired students and officers.
- The news was scripted in Braille and read Live.

About World Braille Day:

- World Braille Day celebrated since 2019, is observed to raise awareness of the importance of Braille as a means of communication in the full realization of the human rights for blind and partially sighted people.

Braille is a tactile representation of alphabetic and numerical symbols, using six dots to represent each letter and number and even musical, mathematical and scientific symbols. Braille (named after its inventor in 19th century France, Louis Braille) is used by blind and partially sighted people to read the same books and periodicals as those printed in a visual font. It is essential in the context of education, freedom of expression and opinion, as well as social inclusion, as reflected in Article 2 of the United Nations Convention on the Rights of Persons with Disabilities.

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HEALTH

1

CORONAVIRUS

Context:

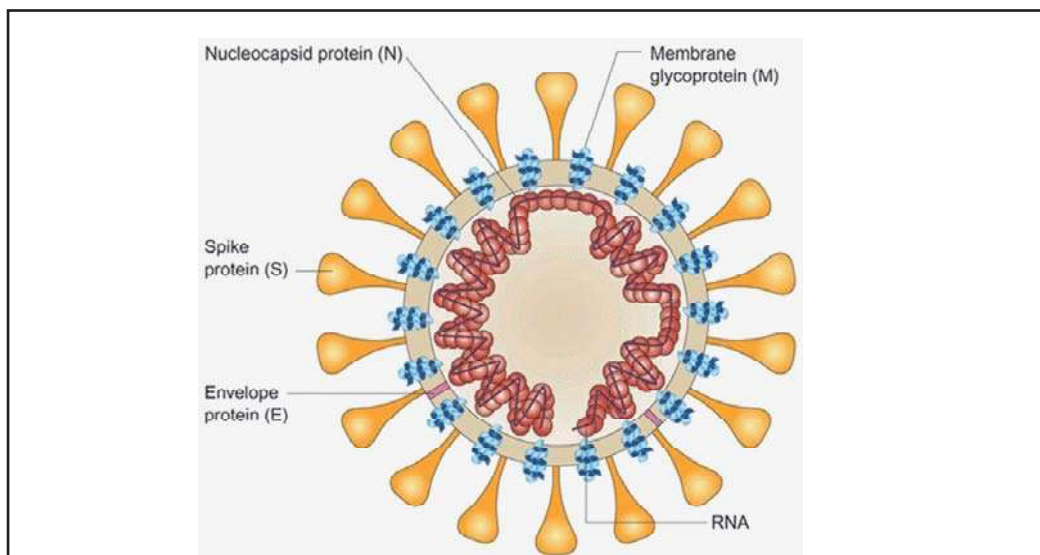
- Recently, the **Lancet** published a study titled “**Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China**”.

Findings of the Study:

- The study highlighted the **high mortality due to the 2019 novel coronavirus (2019-nCoV infection)** which caused clusters of severe respiratory illness similar to severe acute respiratory syndrome (SARS) coronavirus.
- It also pointed out that there are major gaps in the knowledge of the origin, epidemiology, duration of human transmission and clinical spectrum of the disease.
 - Most of the infected patients were men.
 - Less than half had underlying diseases (diabetes, hypertension and cardiovascular ailments).
 - 66% of patients had been exposed to Huanan seafood market.
- Researchers collected and analysed data by real-time **Reverse transcription-polymerase chain reaction (RT-PCR)**.
- RT-PCR is a laboratory technique combining reverse transcription of RNA into DNA and next-generation sequencing.

About Coronavirus:

- Coronaviruses** are a specific family of viruses, with some of them causing **less-severe damage**, such as the common cold and others causing **respiratory and intestinal diseases**.
- A coronavirus has many “**regularly arranged**” **protrusions on its surface**, because of which the entire virus particle looks like an emperor’s crown, hence the name “**coronavirus**”.
- It is an RNA virus** with **ribonucleic acid (RNA)** as its genetic material instead of **deoxyribonucleic acid (DNA)**. That means the virus blends with its host’s DNA and can mutate rapidly.



- Due to this property of rapid mutation, coronaviruses can be quite different from one another.
- These can affect **humans** as well as **mammals including pigs, cattle, cats, dogs, martens, camels, hedgehogs and some birds**.

- There are **four common disease-causing coronaviruses**, while the two other are the **Severe Acute Respiratory Syndrome (SARS) coronavirus** and the **Middle East Respiratory Syndrome (MERS) coronavirus**, both of which can cause **severe respiratory diseases**.
- In the newly identified coronavirus, a direct link with the disease has not been established yet. It was speculated that it was related to the SARS epidemic of 2002.
- World Health Organisation (WHO) has said that further investigations and research are required to determine the source, modes of transmission and extent of infection caused by the new virus.

2

RESTRUCTURING OF NATIONAL HEALTH AGENCY AS “NATIONAL HEALTH AUTHORITY”

Context:

- The Union Cabinet approved the restructuring of existing National Health Agency as “National Health Authority” for better implementation of Pradhan Mantri - Jan Arogya Yojana (PM-JAY).

About:

- With this approval, the existing society “National Health Agency” has been dissolved and will be replaced by National Health Authority as an attached office to Ministry of Health & Family Welfare.
- The National Health Authority would be empowered with full autonomy, accountability and the mandate to implement PM-JAY through an efficient, effective and transparent decision-making process by aligning the accountability with responsibility.
- The National Health Authority would be chaired by Union Health Minister and have representation from the Government and domain experts.

The reasons for restructuring as an authority are:

- To enable faster decision-making.
- Replacing the multi-layered structure with a simplified structure.
- Authority will be able to specify treatment protocols and enforce their compliance.
- The Authority with a stronger mandate would be able to prevent, detect and control frauds, abuse and redress grievances, thus resulting in the reduction of leakages.

It is envisaged that the National Health Authority shall have full accountability, authority and mandate to implement PM-JAY through an efficient, effective and transparent decision-making process.

Pradhan Mantri - Jan Arogya Yojana (PM-JAY)

- ▶ The programme is being touted as the world’s largest health protection scheme. The scheme has two pillars under it –
 - **Ayushman Bharat (AB)** – 5 lakhs health sub-centres will be converted into health and wellness centres.
 - **National Health Protection Mission (NHPM)** – Provides health cover of Rs. 5 lakhs per family, per annum, reaching out to 50 crore beneficiaries.
- ▶ The benefits of the scheme are portable across the country for secondary and tertiary care hospitalisation.
- ▶ Also, a beneficiary covered under the scheme will be allowed to take cashless benefits from any public/private empanelled hospitals across the country.

- ▶ **Coverage** - The scheme will aim to target over 10 crore families based on SECC (Socio-Economic Caste Census) database.
- ▶ It will target poor, deprived rural families and identified occupational category of urban workers' families.
- ▶ It will cover 1,300 illnesses, including serious ones such as cancer and heart diseases.
- ▶ Private hospitals would also be part of the scheme.
- ▶ To ensure that nobody from the vulnerable group is left out of the benefit cover, there will be no cap on family size and age in the scheme.
- ▶ The insurance scheme will cover pre and post-hospitalisation expenses, including pre-existing illnesses.
- ▶ **Funding** - The expenditure incurred in premium payment will be shared between central and state governments in a specified ratio –
 - 60:40 for all states and UTs with their own legislature.
 - 90:10 in Northeast states and the three Himalayan states of Jammu and Kashmir, Himachal and Uttarakhand.
- ▶ 100 per cent central funding for UTs without legislature.
- ▶ The states are also free to continue with their own health programmes.
- ▶ **Mode of funding** - In a trust model, bills are reimbursed directly by the government.
- ▶ Andhra Pradesh, Telangana, Madhya Pradesh, Assam, Sikkim and Chandigarh are the states that will use a trust model for the mission.
- ▶ In an insurance model, the government pays a fixed premium to an insurance company, which pays the hospitals.
- ▶ Gujarat and Tamil Nadu have opted for mixed mode implementation.

3

NEW AIIMS

Context:

- Cabinet approves setting up of 3 new AIIMS to boost to healthcare infrastructure in the country.

About:

- **New AIIMS to come up at**
 - Vijaynagar, Samba in Jammu
 - Awantipur, Pulwama, Kashmir
 - Rajkot, Gujarat

Impact:

- Setting up of new AIIMS would transform health education and training and address the shortfall of health care professionals in the region.
- The establishment of new AIIMS will serve the dual purpose of providing super speciality health care to the population.
- It will also help create a large pool of doctors and other health workers in this region that can be available for primary and secondary level institutions / facilities being created under National Health Mission (NHM).

Background:

- The Pradhan Mantri Swasthya Suraksha Yojana (PMSSY), a Central Sector Scheme, aims at correcting the imbalances in the availability of affordable tertiary healthcare facilities in different parts of the country in general, and augmenting facilities for quality medical education in the under-served states in particular.

4**PRICE FIXATION OF ESSENTIAL MEDICINES****Context:**

- The **National Pharmaceutical Pricing Authority (NPPA)** has taken important measures to check the prices of drugs, under the Drugs (Prices Control) Order (DPCO).

What is an Essential Medicine?

- According to **World Health Organization (WHO)**, Essential medicines are the medicines that "satisfy the priority health care needs of the population".
- People should have access to these medicines at all times in sufficient amounts. The prices should be at generally affordable levels.

NPPA:

- Established in: 1997
- It has been set up as per executive order and thus not a statutory body.
- It is a government regulatory agency which performs the following functions
 - Controlling the prices of pharmaceutical drugs in India
 - Enforce the Drugs Price Control Order (DPCO), 2013
 - Advising the Government of India in matters of drug policies and pricing.
- Parent agency: Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers

What is Drugs Price Control Orders (DPCO), 2013?

- ▶ It is an order issued by the Central Government having power under section 3 of the Essential Commodity Act, 1955 which enables it to fix the prices of essential bulk drugs and their formulations mentioned under the NLEM.
- ▶ The formulations which are included in NLEM i.e. first Schedule of the DPCO 2013 are known as Scheduled Formulations.
- ▶ Any person acting in contravention of the DPCO 2013 is punishable under section 7 of the Essential Commodities Act, 1955

5**CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS BILL, 2019****Context:**

- Union Cabinet has approved for introduction of the Code on Occupational Safety, Health and Working Conditions Bill, 2019 in the Parliament.

More on News:

- This proposal would enhance the coverage of the safety, health and working conditions provisions manifold as compared to the present scenario.
- While the code will be applicable to all trades, including IT establishments and service sector, where more than 10 workers are employed, it will be applicable to mines and docks that employ even one worker.
- The code makes it mandatory for employers to provide free annual medical check-ups and issue appointment letters to all employees.
- The New Code has been drafted after amalgamation, simplification and rationalisation of the relevant provisions of the 13 Central Labour Acts:
 - The Factories Act, 1948;
 - The Mines Act, 1952; The Dock Workers (Safety, Health and Welfare) Act, 1986;
 - The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996;
 - The Plantations Labour Act, 1951;
 - The Contract Labour (Regulation and Abolition) Act, 1970;
 - The Inter-State Migrant workmen (Regulation of Employment and Conditions of Service) Act, 1979;
 - The Working Journalist and other Newspaper Employees (Conditions of Service and Misc. Provision) Act, 1955;
 - The Working Journalist (Fixation of rates of wages) Act, 1958;
 - The Motor Transport Workers Act, 1961;
 - Sales Promotion Employees (Condition of Service) Act, 1976;
 - The Beedi and Cigar Workers (Conditions of Employment) Act, 1966; and
 - The Cine Workers and Cinema Theatre Workers Act, 1981. After the enactment of the Code, all these Acts being subsumed in the Code will be repealed.

Benefits:

- Safety, Health, welfare and improved Working Conditions are pre-requisite for well-being of the worker and also for economic growth of the country as healthy workforce of the country would be more productive and occurrence of less accidents and unforeseen incidents would be economically beneficial to the employers also.
- Code enhances the ambit of provisions of safety, health, welfare and working conditions from existing about 9 major sectors to all establishments having 10 or more employees.

6

FREE LIFE-SAVING AND GENERIC DRUGS

Context:

- Under **Free Drugs Service Initiative (FDSI)** of **National Health Mission**, financial support and technical support is provided to States / UTs for provision of free essential medicines in public health facilities based on the requirements posted by them in their **Programme Implementation Plans (PIPs)** within their overall resource envelope.
- Public health being a State subject, the number of essential medicines to be provided free of cost is decided by the States and varies from State to State.
- However, the Ministry has provided illustrative list of essential medicines that should be provided at Sub Centres, Primary Health Centres, Community Health Centres and District Hospitals.
- The list serves as a reference document for correct dosage form and strength for prescribing.

Drug and Vaccine Distribution Management System (DVDMS)

- Availability of the drugs is being monitored through **Drug and Vaccine Distribution Management System (DVDMS)**.
- It is a **web-based Supply Chain Management System** that deals in purchase, supply, distribution and inventory management of various drugs, sutures, surgical and consumable items.
- It has an in-built provision of monitoring and checking the availability of medicine at all facilities at district and state level.
- It has the functionality for distribution of drugs to patients, thus enabling tracking of consumption till last mile.

Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP)

- It was launched by the **Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers** with an objective of making quality generic medicines available at affordable prices to all.
- Dedicated outlets known as **Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJKs)** are opened to sell generic medicines at affordable rates under this umbrella scheme.

The National List of Essential Medicines (NLEM)

- It is one of the key instruments in healthcare delivery system of a country which includes accessible, affordable quality medicine at all the primary, secondary, tertiary levels of healthcare.
- It promotes rational use of medicines considering the three important aspects i.e. cost, safety and efficacy and prescription by generic names.

7

THE CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS BILL, 2019

Context:

- The government recently introduced the Code on Occupational Safety, Health and Working Conditions Bill, 2019.

The features of the bill are:

- The bill is applicable to business entities where more than 10 workers are employed and it will be applicable to mines and docks that employ even one worker.
- The bill seeks to merge 13 labour laws into one code on occupational safety, health and working conditions.
- The Bill is second of four proposed codes that aim to merge 44 labour laws.
- The code is applicable to all trades, including IT establishments and the service sector.
- The bill makes it mandatory for employers to provide free annual medical check-ups.
- The multiple also proposes to replace committees under five labour Acts with the National Occupational Safety and Health Advisory Board.
- The code also frames rules for women workers working night shifts. Women would be permitted to work beyond 7 p.m. and before 6 a.m. subject to the safety, holidays, working hours or any other condition as prescribed by the appropriate government in respect of prescribed establishments but only after taking their consent for night work.
- The bill also envisages uniform threshold for welfare provisions such as crèche, canteen, first aid and welfare officer.

- The bill states that part of the penalty for contravention of provisions leading to death or serious bodily injury to any person may be given to the victim or the legal heirs of the victim by the court.
- When approved by the parliament the Labour safety code bill is expected to benefit 40 crore workers in informal sectors.

8 JANAUSHADHI SUGAM

Context:

- Union Minister for Chemicals and Fertilizers launched Mobile application- "Janaushadhi Sugam" for locating outlets and searching Generic medicines.

About:

- Union Minister for Chemicals and Fertilizers, Shri D.V. Sadananda Gowda launched a mobile application "Janaushadhi Sugam" and had announced that "Jan Aushadhi Suvidha Oxo-Biodegradable Sanitary Napkin" will now be available at only One Rupee per pad.
- "Jan Aushadhi Suvidha Oxo-Biodegradable Sanitary Napkin" will now be available at only One Rupee per pad. Earlier it costs Rs 2.50.
- Jan Aushadhi Suvidha comes with a special additive, which makes it biodegradable when it comes in contact with oxygen after being discarded.
- This is an important step in ensuring the health security for the section of Indian women who still use unhygienic aids during menstrual period due to non-affordability of sanitary pads available in the market.
- This will ensure 'Swachhta, Swasthya and Suvidha' for the underprivileged women of the country.
- This step taken by the Department of Pharmaceuticals will ensure the achievement of Prime Minister Shri Narendra Modi's vision of "Affordable and Quality Healthcare" for all. It will also help in fulfilling the Prime Minister's dream of "Clean India & Green India" as these pads are oxo-biodegradable and environment friendly.
- Jan Aushadhi Suvidha is being made available for sale in more than 5500 PMBJP Kendras across the country.
- "Janaushadhi Sugam" mobile application would have user-friendly options like- to locate nearby Janaushadhikendra, direction guidance for location of the Janaushadhikendra through Google Map, search Janaushadhi generic medicines, analyse product comparison of Generic vs Branded medicine in form of MRP & overall Savings, etc. The mobile application is available on both Android & iOS platforms. It can be downloaded free of cost by the user from Google Play Store and Apple Store.

9 SAN-SADHAN' HACKATHON

Context:

- The government calls for applications under the Swachh Bharat Mission for the 'San-Sadhan' Hackathon, an initiative to ease lives of Persons with Disabilities (Divyangjan) by making toilets smarter, more accessible, and easier to use.

About:

- The government is looking for smart, scalable and innovative solutions for economical toilets for individual and community use in rural and urban contexts.

- The initiative is being organized jointly by the Ministry of Jal Shakti and the Department of Empowerment of Persons with Disabilities, in collaboration with Atal Innovation Mission, NITI Aayog, Bill & Melinda Gates Foundation, and 91springboard.
- The Hackathon invites researchers, start-ups, student innovators, technology enthusiasts, and industry experts to participate.
- The shortlisted applicants will work to develop their prototype during the two-day Hackathon scheduled to be held in the month of September in New Delhi. The applicants will be showcasing their innovations on the final day of the hackathon and the winners shall be felicitated during the valedictory function which is slated to be held in mid-September.



About the Ministries involved:

■ Department of Drinking Water and Sanitation, Ministry of Jal Shakti:

- The Department of Drinking Water and Sanitation manages the Swachh Bharat Mission Grameen (SBM-G) and is the coordinating department for the overall SBM. Since the launch of the SBM, India's rural sanitation coverage has increased from 39% in 2014 to over 99% as of August 2019, and the Mission is on track to achieve its goal of an ODF India by 2019.
- The Department also manages rural drinking water supply, and is responsible for the JalJeevan Mission, aiming at providing piped water supply to all rural households.

■ Ministry of Social justice and Empowerment:

- In order to give focused attention to Policy issues and meaningful thrust to the activities aimed at welfare and empowerment of the Persons with Disabilities, a separate Department of Disability Affairs was carved out of the Ministry of Social Justice and Empowerment on May 12, 2012.

- The mission of this department is to empower Persons with Disabilities, through its various Acts/ Institutions/Organizations and Schemes for rehabilitation and to create an enabling environment that provides such persons with equal opportunities, protection of their rights and enables them to participate as independent and productive members of society.

■ Atal Innovation Mission:

- Atal Innovation Mission (AIM) is a flagship initiative of Government to promote a culture of innovation and entrepreneurship in the country.

10 FIT INDIA MOVEMENT

Context:

- Prime Minister launched the Fit India Movement in 2019.

About:

- With technological advancements, fast-moving lifestyles and the advent of mobile phones, indigenous forms of fitness are fast losing their popularity, but they can be a great way to remain fit.
- To give up sedentary lifestyles and be active in daily life.
- Fit India Movement aims to motivate every Indian to incorporate simple, easy ways of staying fit in their everyday life.
- It is also a component of Poshan Abhiyaan.

11 GLOBAL FUND FOR AIDS, TB AND MALARIA (GFTAM)

Context:

- India has announced a contribution of 22 million US Dollars to the Global Fund for AIDS, TB and Malaria (GFTAM) for the 6th replenishment cycle (2020-22), an increase of 10% over the amount contributed by us in the 5th cycle.

Ministry/Agency: Ministry of Health and Family Welfare

About:

- India was the first implementing country to host a replenishment milestone of the Global Fund and now has become first among G20, BRICS and implementer countries to announce the pledge for the 6th Replenishment Conference, setting precedent for other donors to contribute generously for the cause.
- India is adequately financing efforts to accomplish our goals of TB, HIV and Malaria elimination and with our increased pledge, India has inched a step closer in this direction by stepping up the Global Fund efforts to strengthen health systems and save 16 million more lives across the globe.

Partnership between India and Global Fund:

- India shares a sustained partnership with the Global Fund since 2002 both as recipient and as a donor.
- Global Fund support with investment of US \$ 2.0 billion so far has made significant contribution in attaining targets related to HIV/AIDS, TB and Malaria reduction and escalating our fight against these three diseases.

- In the current funding cycle (2018-21), the Global Fund has allocated US\$ 500 million to India. As a donor, India has contributed US\$ 46.5 million so far till 2019 including US\$ 20 million for the 5th Replenishment.

12 GLOBAL GOAL KEEPER AWARD

Context:

- Prime Minister Shri Narendra Modi received the 'Global Goalkeeper' Award by Bill and Melinda Gates Foundation for Swachh Bharat Abhiyan, on 24 September 2019.

About:

- The award ceremony took place on the sidelines of the United Nations General Assembly (UNGA) session in New York.
- Prime Minister dedicated the award to those Indians who transformed the Swachh Bharat Abhiyan into a mass movement and made it a part of their daily lives.
- India is making remarkable progress in fulfilling Mahatma Gandhi's dream of a Swachh Bharat.
- More than 11 crore toilets were constructed. This mission has benefitted the poor and women of the country the most. In addition to improving sanitation and health, building of 11 crore toilets has also boosted economic activity in villages.
- On improving global sanitation coverage, India is ready to share its expertise and experiences with other nations, so that there can be collective effort towards increasing sanitation coverage.

13 GUIDELINES RELEASED FOR EVALUATION OF NANOPHARMACEUTICALS IN INDIA

Context:

- The Union Minister for Science & Technology, Earth Sciences and Health & Family Welfare, Dr. Harsh Vardhan released "Guidelines for Evaluation of Nanopharmaceuticals in India"

About:

- "Guidelines for Evaluation of Nanopharmaceuticals in India" is one of the most important steps for delineating quality, safety and efficacy assessment of the novel nanoformulations.
- These guidelines are intended to provide transparent, consistent and predictable regulatory pathways for nanopharmaceuticals in India.
- Nanocarrier based targeted drug delivery is an emerging field with introduction of nanopharmaceuticals in the market.
- These nanoformulations have higher efficacy, lower toxicity and are safer than the conventional drugs. Indian researchers would be facilitated to undertake research in line with the regulatory guidelines and is expected that Industry would be keen to participate from the beginning of the research pipeline towards product development and commercialisation.
- Further, private investments would also be attracted since these guidelines would strengthen the regulatory system.

- The guidelines apply to the nanopharmaceuticals in the form of finished formulation as well as Active Pharmaceutical Ingredient (API) of a new molecule or an already approved molecule with altered nanoscale dimensions, properties or phenomenon associated with the application of nanotechnology intended to be used for treatment, in vivo diagnosis, mitigation, cure or prevention of diseases and disorders in humans.
- The guidelines would facilitate translational research in line with the regulatory requirements.
- Guidelines will also facilitate the decision making by regulator during clearances to newer products based on nanotechnology and similarly to researchers to get clearance for their products to launch in market.
- End users will also be benefited by the quality assured anticipated products in the market in accordance to the guidelines.
- This document will give impetus to initiate activities for developing safety guidelines for other domains like agri-inputs and agri-products, cosmetics, implantable devices, through interventions of nanotechnology.

14 SWACHH – NIRMAL TAT ABHIYAAN

- To strive to make our beaches clean and create awareness amongst citizens about the importance of coastal ecosystems, the Ministry of Environment, Forest and Climate Change (MoEF&CC) are undertaking a mass cleanliness-cum-awareness drive in 50 identified beaches under the "Swachh – Nirmal Tat Abhiyaan".
- 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 the 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.
- Environment Education Division of the Ministry and Society of Integrated Coastal Management (SICOM) under the aegis of this Ministry will be responsible for the overall coordination for the drive in 50 beaches. Respective State Governments and Central Ministries will also be actively participating in the beach cleaning drives.
- The Ministry has also decided that on completion of the drive, best three beaches will be suitably awarded along with a Certificate of Appreciation for all the participating Eco-clubs.

15 NATIONAL INSTITUTE FOR SOWA-RIGPA

- It has been decided by the Government of India to promote Sowa-Rigpa system of medicine by establishing a **National Institute of Sowa-Rigpa (NISR) at Leh, Union Territory of Ladakh** at an estimated cost of Rs.47.25 crore.
- 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, Union Territory of Ladakh and now all over India.
- The Institute will be an **autonomous National Institute under 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 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 to promote interdisciplinary research & education of Sowa-Rigpa at undergraduate, postgraduate and postdoctoral levels.

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

16 JANSANKHYA STHIRATA KOSH

Jansankhya StirthaKosh (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), and
- National Helpline (for information on family planning).

17 STEPS BEING TAKEN BY THE GOVERNMENT TO CONTROL POPULATION GROWTH

- **Mission Parivar Vikas:** The Government has launched Mission Parivar Vikas for substantially increasing access to contraceptives and family planning services in 146 high fertility districts with Total Fertility Rate (TFR) of 3 and above in seven high focus states. These districts are from the states of Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Assam that itself constitutes 44% of the country's population.
- **New Contraceptive Choices:** New contraceptives viz. Injectable contraceptive and Centchroman have been added to the existing basket of choices.
- A new method of IUCD insertion immediately after delivery i.e. **post-partum IUCD (PPIUCD)** has been introduced.
- **Redesigned Contraceptive Packaging:** The packaging for Condoms, OCPs and ECPs has now been improved and redesigned so as to increase the demand for these commodities.
- **Compensation scheme for sterilization acceptors:** Under the scheme MoHFW provides compensation for loss of wages to the beneficiary and also to the service provider (& team) for conducting sterilizations.
- **Clinical Outreach Teams (COT) Scheme** - The scheme has been launched in 146 Mission ParivarVikas districts for providing Family planning services through mobile teams from accredited organizations in far-flung, underserved and geographically difficult areas.
- Scheme for **Home delivery of contraceptives by ASHAs** at doorstep of beneficiaries.
- Scheme for **ASHAs to Ensure spacing in births.**
- Scheme for provision of **Pregnancy Testing Kits** in the drug kits of ASHAs for use in communities.
- **Family Planning Logistic Management and Information System (FP-LMIS):** A dedicated software to ensure smooth forecasting, procurement and distribution of family planning commodities across all the levels of health facilities.
- **National Family Planning Indemnity Scheme (NFPIS)** under which clients are insured in the eventualities of death, complication and failure following sterilization.
- Ensuring quality of care in Family Planning services by establishing **Quality Assurance Committees** in all states and districts.
- Appointment of dedicated **RMNCH+A counselors** at high case load facilities.
- Improved Demand generation activities through a **360 degree media campaign.**

18 AYUSHMANBHARAT -PRADHANMANTRI JAN AROGYAYOJANA

- Government of India has launched Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) on 23.09.2018. PMJAY is a centrally sponsored scheme. It is entirely funded by Government and the funding is shared between Centre and State governments as per prevailing guidelines of Ministry of Finance.
- PMJAY provides health cover up to Rs. 5 lakh per family per year for secondary and tertiary hospitalization to around 10.74 crore poor and vulnerable families (approx. 50 crore beneficiaries).
- PMJAY is an entitlement based scheme. This scheme covers poor and vulnerable families based on deprivation and occupational criteria as per SECC database.
- PMJAY provides cashless and paperless access to services for the beneficiary at the point of service in any (both public and private) empanelled hospitals across India. In other words, a beneficiary from one State can avail benefits from an empanelled Hospital anywhere in the Country.
- Under PMJAY, the States are free to choose the modalities for implementation. They can implement the scheme through insurance company or directly through the Trust/ Society or mixed model.
- There is no restriction on family size, ensuring all members of designated families specifically girl child and senior citizens get coverage.
- A well-defined Complaint and Public Grievance Redressal Mechanism, has been put in place through which complaints/ grievances are registered, acknowledged, escalated for relevant action, resolved and monitored.
- PMJAY has created a robust IT system for implementation and role of real time transaction data.
- At National level, National Health Authority (NHA) has been set up as an attached office to Ministry of Health and Family Welfare to manage the implementation of the scheme.

19 NATIONAL POLICY TO TACKLE DRUG ABUSE

- The Ministry of Social Justice and Empowerment has formulated and is implementing a National Action Plan for Drug Demand Reduction (NAPDDR) for 2018-2025.
- The Plan aims at reduction of adverse consequences of drug abuse through a multi-pronged strategy. The activities under the NAPDDR, inter-alia, include awareness generation programmes in schools/colleges/ Universities, workshops/seminars/ with parents, community based peer led interactions intervention programmes for vulnerable adolescent and youth in the community, provisioning of treatment facilities and capacity building of service providers.
- The Ministry also implements a "Central Sector Scheme of Assistance for Prevention of Alcoholism and Substance (Drug) Abuse" under which financial assistance is provided to eligible Non-Governmental Organizations based on the recommendations of State Governments/UT Administrations for running Integrated Rehabilitation Centres for Addicts to provide composite/integrated services for the rehabilitation of addicts including adolescents.

20 NATIONAL AYUSH GRID

- The AYUSH Grid is envisaged as a comprehensive IT backbone covering the different silos of the AYUSH Sector. Ministry of AYUSH has finalised components of AYUSH Grid Project in consultation with various stakeholders. The process of Expression of Interest (EOI) and Request for Proposal (RFP) for on-boarding

of Project Management Consultancy (PMC) for the AYUSH Grid Project has been completed and the eligible agency discovered through the process has been selected.

- Ministry of AYUSH has taken up various pilot projects like AYUSH Hospital Management Information System (A-HMIS), Yoga locator application, Telemedicine, Yoga Portal, A-HMIS trainings, IT course for AYUSH Professionals, etc. which shall be merged into AYUSH Grid Project after completion of pilot period.
- Ministry of AYUSH has also signed Memorandum of Understanding (MoU) with Ministry of Electronics and Information Technology (MeitY) for technical help in AYUSH Grid Project and accordingly, Ministry has handed over projects of Dashboard, GIS facility for various functionalities of AYUSH and AYUSH Information Hub to National e- Governance Division(NeGD)/ Bhaskaracharya Institute for Space Applications and Geo-Informatics(BISAG).

21**MEDICAL DEVICE PARK**

- Department of Pharmaceuticals under the Ministry of Chemicals & Fertilizers has a sub-scheme viz. Assistance to Medical Device Industry for Common Facility Center under the umbrella scheme for Development of Pharmaceuticals Industry.
- Under this sub-scheme, financial assistance to the tune of Rs. 25 Crore or 70% of the project cost, whichever is less may be provided for creation of common facilities under any Medical Device Park promoted by State Governments/State Corporations.
- Department of Pharmaceuticals has received four proposals under this sub-scheme from (i) Andhra Pradesh Medtech Zone Ltd. (AMTZ), Andhra Pradesh, (ii) Telangana Medical Device Park, Telangana (iii) Kerala State Industrial Development Corporation (KSIDC), Kerala & (iv) HLL, Medipark Ltd (HML), Tamil Nadu. Department of Pharmaceuticals has given 'in-principle' approval to all the said proposals.

22**NATIONAL DEWORMING DAY (NDD)**

- The Ministry of Health and Family Welfare (MoHFW) conducted the tenth round of National Deworming Day (NDD) on February 10, 2020.
- Launched in 2015, the NDD is the largest public health program implemented on a single day reaching crores of children and adolescents through two NDD rounds every year.
- As part of this campaign, children and adolescents aged 1-19 years are being administered Albendazole (400 mg) across government, government-aided schools, anganwadis, private schools and other educational institutions.
- The NDD is implemented with an objective to reduce the prevalence of Soil-Transmitted Helminths (STH), commonly called the parasitic intestinal worms, among all children and adolescents.
- Infections with the main STH – roundworm, whipworm and hookworms – contribute to 50.1 lakh disability-adjusted life-years (DALYs) worldwide (WHO, 2010).
- One DALY can be thought of as one lost "healthy" year from the life. In India, over 22 crore children under 14 years are at risk of STH infections (WHO, 2017).

- World Tuberculosis Day is being observed on 24th March, 2020 to commemorate the anniversary of Dr. Robert Koch's discovery of the Tuberculosis (TB) bacteria in 1882.
- Government of India has committed to eliminate prevalence of TB by 2025, with commensurate resources to rapidly reduce TB incidence prevalence and mortality in India.

Tuberculosis (TB):

- Tuberculosis (TB) is caused by bacteria (*Mycobacterium tuberculosis*) that most often affect the lungs. Tuberculosis is curable and preventable.
- TB is spread from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air. A person needs to inhale only a few of these germs to become infected.
- About one-quarter of the world's population has latent TB, which means people have been infected by TB bacteria but are not (yet) ill with the disease and cannot transmit the disease.

8



**INTERNATIONAL
RELATIONS**

1 CURRENCY SWAP ARRANGEMENT FOR SAARC

Context:

- Cabinet approves Amendment to the 'Framework on Currency Swap Arrangement for SAARC Member Countries' to incorporate 'Standby Swap' amounting to USD 400 million operated within the overall size of the facility.

Salient features:

- Due to heightened financial risk and volatility in global economy, short term swap requirements of SAARC countries could be higher than the agreed lines.
- The incorporation of 'Standby Swap' within the approved SAARC Swap Framework would provide necessary flexibility to the Framework and would enable India to provide a prompt response to the current request from SAARC member countries for availing the swap amount exceeding the present limit prescribed under the SAARC Swap Framework.

SAARC Swap Framework:

- ▶ The Framework on Currency Swap Arrangement for SAARC Member Countries was formulated with the intention to provide a line of funding for short term foreign exchange requirements or to meet the balance of payments crises till longer-term arrangements are made or the issue is resolved in the short-term itself.
- ▶ It was approved by the Government of India on March 1st, 2012.
- ▶ Under the framework RBI offers swaps of varying sizes to each SAARC Member countries depending on their two months import requirement, not exceeding US\$ 2 billion in total, in USD, Euro or INR.

2 TRADE DEFICIT BETWEEN INDIA AND CHINA

Context:

- Government of India has been taking continuous and sustained steps to bridge trade deficit by lowering the trade barriers for Indian exports to China.

About:

- During the 11th session of India-China Joint Group on Economic Relations(JEG) held in New Delhi in March 2018, the Trade Ministers of two countries agreed to increasing bilateral trade between the two countries in a balanced and more sustainable manner.
- In this regard various meetings have been held with Chinese counterparts as a part of ongoing efforts to seek market access for various Indian agricultural products, animal feeds, oil seeds, milk and milk products, pharmaceutical products etc., in light of the potential of these products/services in the Chinese market.
- Protocols have been signed to facilitate export of Indian rice, rapeseed meal, fishmeal – fish oil and tobacco leaves from India to China.

An anti-dumping duty:

- ▶ It is a protectionist tariff that a domestic government imposes on foreign imports that it believes are priced below fair market value. Dumping is a process where a company exports a product at a price lower than the price it normally charges in its own home market.

- ▶ To protect local businesses and markets, many countries impose stiff duties on products they believe are being dumped in their national market.

Countervailing duties (CVDs):

- ▶ Also known as anti-subsidy duties, CVDs are trade import duties imposed under World Trade Organization (WTO) rules to neutralize the negative effects of subsidies. They are imposed after an investigation finds that a foreign country subsidizes its exports, injuring domestic producers in the importing country.
- ▶ According to WTO rules, a country can launch its own investigation and decide to charge extra duties, provided such additional duties are in accordance with the GATT Article VI and the GATT Agreement on Subsidies and Countervailing Measures.

3

INDUS WATERS TREATY 1960: PRESENT STATUS OF DEVELOPMENT IN INDIA

Context:

- Under the Indus Waters Treaty signed between India and Pakistan in 1960, all the waters of three rivers, namely Ravi, Sutlej and Beas (Eastern Rivers) averaging around 33 million acre feet (MAF) were allocated to India for exclusive use.

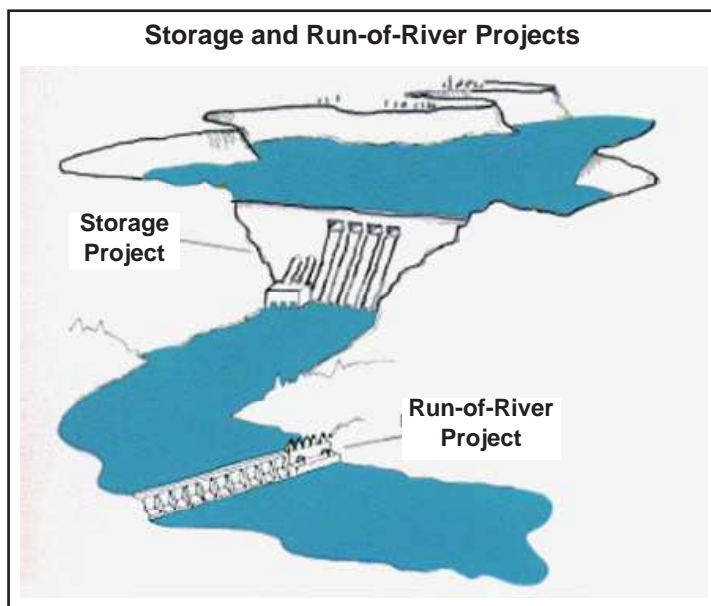
About:

- The Indus system comprises of main Indus River, Jhelum, Chenab, Ravi, Beas and Sutlej. The basin is mainly shared by India and Pakistan with a small share for China and Afghanistan.
- Under the Indus Waters Treaty signed between India and Pakistan in 1960, The waters of Western rivers - Indus, Jhelum, and Chenab averaging to around 135 MAF were allocated to Pakistan except for specified domestic, non-consumptive and agricultural use permitted to India as provided in the Treaty.
- India has also been given the right to generate hydroelectricity through run of the river (RoR) projects on the Western Rivers which, subject to specific criteria for design and operation is unrestricted.

Present status of development in India:

- To utilize the waters of the Eastern Rivers which have been allocated to India for exclusive use, India has constructed Bhakra Dam on Satluj, Pong and Pandoh Dam on Beas and Thein (Ranjitsagar) on Ravi. These storage works, together with other works like Beas-Sutlej Link, Madhopur-Beas Link, Indira Gandhi Nahar Project etc has helped India utilize nearly entire share (95 %) of waters of Eastern rivers. However, about 2 MAF of water annually from Ravi is reported to be still flowing unutilized to Pakistan below Madhopur.
- To stop the flow of these waters that belong to India for its utilization in India, following steps have been taken:
 - **Resumption of Construction of Shahpurkandi project:**
 - This project will help in utilizing the waters coming out from powerhouse of Thein dam to irrigate 37000 hectares of land in J&K and Punjab and generate 206 MW of power.
 - **Construction of Ujh multipurpose project:**
 - This project will create a storage of about 781 million cu m of water on river Ujh , a tributary of Ravi for irrigation and power generation in India itself and provide a total irrigation benefits of 31,380 ha in Kathua, Hiranagar and Samba district of J&K apart from providing water for the district Kathua of J&K.
- **The 2nd Ravi Beas link below Ujh:**

- This project is being planned to tap excess water flowing down to Pakistan through river Ravi, even after construction of Thein Dam, by constructing a barrage across river Ravi for diverting water through a tunnel link to Beas basin.



4

INDO-PACIFIC REGIONAL DIALOGUE – 2019

Context:

- In continuation of the process of engaging the global strategic community in an annual review of India's opportunities and challenges in the Indo-Pacific region, the second edition of Indo-Pacific Regional Dialogue (IPRD) - 2019 was held on 05 and 06 March 2019 at the Manekshaw Centre, New Delhi.

About:

This dialogue was built upon the foundation laid by the inaugural edition and examined five fresh themes:

- Practical solutions for achieving cohesion in the region through maritime connectivity;
- measures to attain and maintain a free-and-open Indo-Pacific;
- a regional approach to the region's transition from a 'Brown' to a 'Blue' economy;
- opportunities and challenges arising from the maritime impact of 'Industry 4.0'; and
- How the twin conceptualisations of 'SAGAR' and 'SAGARMALA'

5

AFINDEX-19

Context:

- Inaugural Africa-India Field Training Exercise-2019 for India and African nations called AFINDEX-19 from 18 March to 27 March 2019 started with a grand opening ceremony on 18 March 2019 at Aundh Military Station, Pune.

About:

- The aim of the exercise was to practice the participating nations in planning and conduct of Humanitarian Mine Assistance and Peace Keeping Operations under Chapter VII of United Nations Peace Keeping Operations.
- The exercise focussed on exchange of best practices between the participating nations, team building and tactical level operations in conduct of United Nations mandated tasks to include establishment of a new mission, siting of a United Nations Headquarters for Peace Keeping operations, siting of Military Observer sites during the peace keeping missions, protection of civilians, nuances of standing combat deployment, convoy protection, patrolling aspects and aspects related to Humanitarian Mine Assistance.
- AFINDEX-19 aimed to train the participating contingents in Humanitarian Mine Assistance (HMA) and Peace Keeping Operations (PKO) under the United Nations Charter through practical and comprehensive discussions and tactical exercises
- Contingents from Egypt, Ghana, Nigeria, Senegal, Sudan, South Africa, Tanzania, Namibia, Mozambique, Uganda, Niger & Zambia were part of the joint exercise together with officers from Rwanda, Democratic Republic of Congo and Madagascar as Observers.
- AFINDEX-19 has greatly facilitated sharing of Indian Armed Forces experiences in United Nations Peace Keeping operations with countries in Africa and significantly enhanced relations with the African continent.

6**SECOND SCO MASS MEDIA FORUM AT BISHKEK****Context:**

- The Second Shanghai Cooperation Organization (SCO) Mass Media Forum was held at Bishkek, Kyrgyzstan from 23-26 May, 2019.

About:

- The Forum aims to strengthen the exchange and cooperation in the field of mass media amongst SCO countries.
- It offers a unique platform for active work through mass media to create an objective vision of the organization and strengthen its positive image in the global information space.
- The representative of state bodies supervising mass media of the SCO countries (Member States, Observer Countries, Dialogue Partners); representatives of leading mass media of the SCO countries and representatives of the SCO Secretariat participating in the Forum.

Background:

- The first SCO Media Summit was held in Beijing on 1 June 2018. This event was held under the motto "Development of the "Shanghai Spirit" and opening of a new era in the mass media cooperation", where over 110 media outlets from 16 countries participated, including the SCO Member States, Observer States and Dialogue Partners.

The Shanghai Cooperation Organization (SCO):

- The Shanghai Cooperation Organization (SCO), or Shanghai Pact, is a Eurasian political, economic, and security alliance, the creation of which was announced on 15 June 2001 in Shanghai, China by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan; the Shanghai Cooperation Organisation Charter, formally establishing the organisation, was signed in June 2002 and entered into force on 19 September 2003.

- The original five nations, with the exclusion of Uzbekistan, were previously members of the Shanghai Five group, founded on 26 April 1996. Since then, the organisation has expanded its membership to eight countries when India and Pakistan joined SCO as full members on 9 June 2017 at a summit in Astana, Kazakhstan.
- The Heads of State Council (HSC) is the supreme decision-making body in the SCO, it meets once a year and adopts decisions and guidelines on all important matters of the organisation.
- Military exercises are also regularly conducted among members to promote cooperation and coordination against terrorism and other external threats, and to maintain regional peace and stability.
- The SCO is widely regarded as the “alliance of the East”, due to its growing centrality in Asia-Pacific, and has been the primary security pillar of the region. It is the largest regional organisation in the world in terms of geographical coverage and population, covering three-fifths of the Eurasian continent and nearly half of the human population.

7

WITHDRAWAL OF INDIA'S GSP BENEFITS BY USA

Context:

- The United States of America (USA) has w.e.f. 5 June 2019 withdrawn India's GSP benefits.

About:

- The step was taken on determining that India has not committed to provide “equitable and reasonable access to its markets” for the US.
- Under the US's oldest preferential trade scheme called GSP, India is the largest beneficiary nation and exported goods worth \$6.35 billion under the scheme in 2018.
- **Reasons:** Cited by trump administration are trade imbalance with India, no access to Indian market for US dairy, medical device industry and issues related to data localisation norms.
- **Outcome:** As per the traders, exports are likely to become costlier, even less competitive in specific sectors, but the overall impact would be minimal on India's outbound trade with US. Although, some specific exports from India in sectors like leather, jewellery, agricultural products chemicals and pharmaceuticals are set to face higher costs and competition.

GSP benefits

- ▶ The Generalized System of Preferences is unilateral, non-reciprocal and non-discriminatory benefits extended by some developed nations to developing countries.
- ▶ GSP was instituted on 1 January 1976, by Trade Act of 1974. The GSP program has effective dates which are specified in relevant legislation thus in order to remain in effect it requires periodical reauthorization.
- ▶ The U.S. designed trade program seeks to promote economic growth in developing countries by providing preferential duty-free entry for up to 4,800 products from 129 designated beneficiary countries and territories.
- ▶ Eligibility Criteria: As per US norms, to qualify for GSP a beneficiary nation must meet 15 discretionary and mandatory eligibility criteria established by US Congress which includes providing US with equitable and reasonable market access, respecting mutual and internationally recognised worker rights, working for combating child labour and providing adequate and effective intellectual property rights (IPR) protection. But, reinstatement of GSP benefits is conditional.

8

UN CONVENTION ON INTERNATIONAL SETTLEMENT AGREEMENTS

Context:

- The Union Cabinet chaired by Prime Minister has approved the signing of the United Nations Convention on International Settlement Agreements (UNISA) resulting from mediation by India.

Benefit:

- Signing of the Convention will boost the confidence of the investors and shall provide a positive signal to foreign investors about India's commitment to adhere to international practice on Alternative Dispute Resolution (ADR).

Background:

- The United Nations General Assembly adopted the United Nations Convention on International Settlement Agreements Resulting from Mediation ("the Convention") on 20th December 2018.
- The General Assembly authorized that the Convention will open for signature at a signing ceremony to be held on 7th August 2019 in Singapore and will be known as the "Singapore Convention on Mediation" (the Convention).
- The Convention provides a uniform and efficient framework for the enforcement of international settlement agreements resulting from mediation and for allowing parties to invoke such agreements.
- The Convention defines two additional grounds upon which a court may, on its own motion, refuse to grant relief. Those grounds relate to the fact that a dispute would not be capable of settlement by mediation or would be contrary to public policy.

Initiatives to promote ADR Mechanisms:

- In order to encourage international commercial arbitration in India, to evolve a comprehensive ecosystem of arbitration the Government is establishing the New Delhi International Arbitration Centre (NDIAC) as a statutory body.
- The Commercial Courts Act, 2015, has been further amended and legislative exercise to further amend the Arbitration and Conciliation Act, 1996, is currently underway.
- These initiatives are being taken with a view to encourage the settlement of commercial disputes, domestic and international, in India through ADR Mechanism of Arbitration, Conciliation and Mediation.
- A new Chapter (IIIA) has been inserted in the Commercial Courts Act, 2015, for mandatory pre-institution mediation and settlement in certain category of cases. Therefore, the provisions of the 'Convention' are in line with the domestic laws and the efforts made to strengthen Alternative Dispute Resolution Mechanisms.

9

WORLD SKILLS KAZAN 2019

Context:

- 45th WorldSkills Competition is being held at the KAZAN EXPO International Exhibition Centre in Kazan, Russia. The 48-member Indian Team representing the country at World Skills Kazan 2019.

About:

- It is a flagship event of the World Skills International, organised every two years.
- It is the biggest vocational education and skills excellence event in the world that truly reflects global industry.
- The aims of the competition include demonstrating the advantages of learning a vocational skill, and encouraging 'parity of esteem' between vocational and academic qualifications.
- World skills currently has 79 Member countries and regions, most of which organise national skills competitions that help to prepare the workforce and talent of today for the jobs of the future.
- WorldSkills International was formerly known as the International Vocation Training Organisation (IVTO).
- It was founded in the 1940s and emerged from a desire to create new employment opportunities for young people in some of the economies that were devastated by the Second World War.

World Skills India:

WorldSkills India is an initiative of the National Skill Development Corporation (NSDC) under the Ministry of Skill Development and Entrepreneurship. NSDC, through its WorldSkills India initiative, has been leading the country's participation at WorldSkills International competitions since 2011

10

4TH GENERAL ASSEMBLY OF ASSOCIATION OF WORLD ELECTION BODIES (AWEB)

Context:

- Chief Election Commissioner, Shri Sunil Arora assumed Chairmanship of Association of World Election Bodies (AWEB) for the term 2019-21 as India takes over the Chair from Romania.

Ministry/Agency: Election Commission

About:

- India was unanimously nominated to be the Vice-Chair of AWEB at the last General Assembly held at Bucharest in 2017.
- The AWEB Flag was handed over to the new Chairman, Sh. Sunil Arora. The Flag will remain with Election Commission of India for the two year term till 2021.
- CEC Sh Sunil Arora along with the two Election Commissioners of India Sh. Ashok Lavasa and Sh. Sushil Chandra also launched ECI's quarterly magazine – 'VOICE International' which shares best practices from more than 25 Countries.
- India, the host nation for 4th general assembly, has been one of the founding members of the A-WEB.
- India hosted the three day AWEB meetings in Bengaluru. The International Conference on "Initiatives and Challenges of Social Media and Information Technology in Elections" was held on concluding day.
- EMBs from Ukraine, Cambodia, Afghanistan, Political Parties Registration Commission of Sierra Leone, Indonesia and Mauritius joined the A-WEB family as Members and the Association of Asian Election Authorities (AAEA) as an Associate Member.
- Since its inception in October 2013, A-WEB has marched ahead empowering the democratic framework of member countries. With 120 EMBs from 111 countries as its Members and 21 International Organisations as Associate Members, it has truly become the largest global organisation of Election Management Bodies providing momentum to the spread of electoral democracy, the Chair noted.

11 16TH AEM-INDIA CONSULTATIONS

Context:

- Economic Ministers from ten ASEAN Member States and the Minister of Commerce and Industry of the Republic of India ("the Ministers") met on 10 September 2019 at Bangkok in Thailand for the sixteenth AEM-India Consultations.

Ministry/Agency: Ministry of Commerce & Industry

About:

- The Ministers noted the on-going **efforts for the ratification of the ASEAN-India Investment Agreement** and looked forward to the full ratification by all Parties as soon as possible.
- The Ministers agreed to initiate the review of the ASEAN-India Trade in Goods Agreement (AITIGA) to make the AIFTA more user-friendly, simple, and trade facilitative for businesses and to constitute a Joint Committee, as provided in Article 17 of the AITIGA, for this purpose.
- The Ministers expressed their support for the Fourth ASEAN-India Business Summit and Business Excellence Award, which will be held in Manila in October 2019.

India, US held 2+2 Ministerial Dialogue:

- India and the United States held the '2+2' ministerial dialogue in Washington where two countries exchanged views on regional and global issues.
- This 2+2 Ministerial is the highest-level institutional mechanism between the two countries and provides for a review of the security, defence and strategic partnership between India and the United States.
- This was the second 2+2 meeting and the first in the US.

12 AFGHANISTAN FIRST COUNTRY TO RECOGNIZE INDIAN PHARMACOPOEIA:

- The Indian Pharmacopoeia (IP) has been recognised formally by the National Department of Regulation of Medicines and Health Products of the Ministry of Public Health of Islamic Republic of Afghanistan.
- It will also be used based on the requirement as reputable pharmacopoeia in the laboratory of medicines and health products quality.
- With this, a new beginning has been made and Afghanistan has become the first country to recognize IP pursuant to the efforts of the Department of Commerce and Ministry of Health and Family Welfare.
 - IP is an officially recognized book of standards as per the Drugs and Cosmetics Act, 1940 and Rules 1945 thereunder.
 - The IP specifies the standards of drugs manufactured and marketed in India in terms of their identity, purity and strength.
 - As per, the Second Schedule of the Drugs and Cosmetics Act, IP is designated as the official book of standards for drugs imported and/or manufactured for sale, stock or exhibition for sale or distribution in India.

13 CALL ON INTEGRATED LOCAL ENERGY SYSTEMS

- **India-European Union Flagship Call on Integrated Local Energy Systems** was announced at **India Smart Utility Week 2020**.
- This partnership between Indian and European Union will help in Clean Energy and Climate and this partnership will foresee strengthened cooperation in energy research and innovation, mainly in renewable energy and its integration in the energy system.
- The collaboration can make energy supply cleaner, more efficient and affordable to all.
- This Indo-EU flagship call is fully in line with both the European Union's and India's involvement in **Mission Innovation (MI)**, a global initiative of 24 countries and the European Commission (on behalf of the European Union), committed to reinvigorate and accelerate global clean energy innovation to make clean energy widely affordable.
- This Indo-EU Flagship call will give novel solutions encompassing local integration across various energy vectors and increase the share of renewables in the energy mix and high energy efficiency.

14 15th EDITION OF PRAVASI BHARATIYA DIWAS

Context:

- Prime Minister Narendra Modi and his Mauritian counterpart Pravind Jugnauth inaugurated the plenary session of the 15th edition of Pravasi Bharatiya Diwas at Deendayal Hastkala Sankul in Varanasi.

About:

- Theme of this year's PBD was "Role of Indian Diaspora in building a New India".
- The mega event was organised by Ministry of External Affairs (MEA) in association with Uttar Pradesh government.

Pravasi Bharatiya Divas:

- ▶ The day commemorates the return of Mahatma Gandhi from South Africa to Mumbai on 9 January 1915
- ▶ It is celebrated to mark the contribution of the overseas Indian community to the development of India. During the event Pravasi Bharatiya Samman are also given.
- ▶ The day was formally established in 2003 and is sponsored by the Ministry of Overseas Indian Affairs and the Federation of Indian Chambers of Commerce and Industry (FICCI), the Confederation of Indian Industry (CII) and the Ministry of Development of the North Eastern Region of India.
- ▶ The decision to celebrate Pravasi Bharatiya Divas was taken in accordance with recommendations of the High Level Committee on the Indian Diaspora set up by India Government under the chairmanship of L M Singhvi.

9



**SCHEME/
PROGRAMME/
SOCIAL JUSTICE**

1 FOOD SAFETY MITRA (FSM) SCHEME

Context:

- Dr Harsh Vardhan launches Food Safety Mitra (FSM) scheme for strengthening and scaling up 'Eat Right India' movement. Also launches 'Eat Right Jacket' and 'Eat Right Jhola' on World Food Day 2019

About:

- The theme for this day was 'Healthy Diets for a Zero Hunger World'.
- Launched the 'Food Safety Mitra (FSM)' scheme, along with the 'Eat Right Jacket', and 'Eat Right Jhola' to strengthen food safety administration and scale up the 'Eat Right India' movement.
- Eat Right India movement is a crucial trigger for the much needed social and behavioural change.
- This campaign along with the 'Fit India' Movement' can achieve huge success if the right strategy is adopted and efforts are made to reach out to every section of the society.
- The 'Food Safety Mitra (FSM)' scheme will support small and medium scale food businesses to comply with the food safety laws and facilitate licensing and registration, hygiene ratings and training. Apart from strengthening food safety, this scheme would also create new employment opportunities for youth, particularly with food and nutrition background.
- The 'Eat Right Jacket' launched today will be used by the field staff. This jacket has a smart design to hold tech devices like tablets/smart phone, a QR code and RFID tag for identification and tracking. Apart from providing safety to field staff on duty, this would bring in efficiency, professionalism and transparency in food safety administration and bring in a sense of ownership & visibility of FSOs.
- The 'Eat Right Jhola', a reusable cloth bag shall replace plastic bags for grocery shopping in various retail chains. Since on repeated use, bags are often contaminated with microorganisms and bacteria, proper and regular washing of cloth bags is essential to ensure safety and hygiene. These cloth bags are being provided on rental basis through a private textile rental service company.
- FSSAI has partnered with the Domestic Workers Sector Skill Council (DWSSC) under the Ministry of Skill Development and Entrepreneurship to launch a training course for domestic workers and homemakers across the country.

2 PENSION COVERAGE TO TRADING COMMUNITY

Context:

- The Government has approved a pension scheme for shopkeeper's/ retail traders and self-employed persons for providing monthly minimum assured pension of Rs. 3000/- for the entry age group of 18-40 years.

About:

- As per **Indian Brand Equity Foundation (IBEF)** analysis, 2019, retail industry contributes 10 % to the country's Gross Domestic Product (GDP) and around 8 % to employment.

Features of the scheme:

- All shopkeepers/retail-traders/ self-employed persons in the age group of 18-40 years are eligible to be the member, on self-declaration.
- A shop keeper/ retail-trader /self-employed person if registered with GSTN, his/ her firm's annual turnover should not exceed Rs. 1.5 crore.

- He/she should not be an income tax payee.
- He/she should not be a member of EPFO/ESIC/NPS/PM-SYM.
- The Central Government's share will be matching to the subscriber's contribution.

3 JAL SHAKTI ABHIYAN

Context:

- Union Jal Shakti Minister, announced the commencement of the Jal Shakti Abhiyan – a campaign for water conservation and water security.

About the Abhiyan:

- According to Jal Shakti ministry, there is no additional funding or specific targets for Jal Shakti Abhiyan (JSA) to achieve.
- A large-scale communications campaign has also been planned alongside the JSA involving mass mobilisation of different groups including school students, college students, swachhagrahis, Self Help Groups, Panchayati Raj Institution members, youth groups (NSS/NYKS/NCC), defence personnel, ex-servicemen and pensioners, among various others.
- The conservation efforts will be supplemented by initiatives like developing block and district water conservation plans and 'krishi vigyan kendra melas' to promote efficient water use for irrigation and better crop choices.

Jal Shakti Abhiyan:

- The campaign would run from July 1 to September 15 in States receiving rainfall during the south-west monsoon, while States receiving rainfall in the retreating or north-east monsoon would be covered from October 1 to November 30.
- It is a collaborative effort of various ministries of the Government of India and state governments, being coordinated by the Department of Drinking Water and Sanitation (DDWS) that comes under the Jal Shakti Ministry.
- An important part of this Abhiyan is that it will focus on five aspects - water conservation and rainwater harvesting, renovation of traditional and other water bodies, reuse of water and recharging of structures, watershed development, and intensive afforestation.

Objective of Jal Shakti Abhiyan:

- to "bring sensitivity on the subject of water conservation, and give it a focussed approach"
- to create a baseline of water
- to increase awareness among people to conserve water

4 RASTRIYA YUVA SASHAKTIKARAN KARYAKRAM SCHEME

Context:

- The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the continuation of Rastriya Yuva Sashaktikaran Karyakram Scheme for the period 2017-18 to 2019-2020 with budget outlay of Rs.1160 crore as recommended by EFC.

Features:

- During 12th FYP period, in rationalization exercise undertaken in consultation with Ministry of Finance and NITI Aayog, the eight schemes were brought under the umbrella scheme of Rashtriya Yuva Sashaktikaran Karyakram as sub-schemes.
- This has helped in achieving better synergies between the Schemes and thereby, improves their effectiveness and help in achieving better outcomes with the available resources.
- The Scheme beneficiaries are the youth in the age-group of 15-29 years, in line with the definition of 'youth' in the National Youth Policy, 2014. In case of programme components specifically meant for the adolescents, the age-group is 10-19 years.

Following are eight sub-schemes under Rashtriya Yuva Sashaktikaran Karyakram:

- Nehru Yuva Kendra Sangathan(NYKS);
- National Youth Corps (NYC);
- National Programme for Youth & Adolescent Development (NPYAD);
- International Cooperation;
- Youth Hostels (YH);
- Assistance to Scouting & Guiding Organizations;
- National Discipline Scheme (NDS); and
- National Young Leaders Programme (NYLP).

5

NATIONAL RURAL ECONOMIC TRANSFORMATION PROJECT UNDER THE DEENDAYAL ANTYODAYA YOJANA – NATIONAL RURAL LIVELIHOODS MISSION (DAY-NRLM)

Context:

- The Union Cabinet chaired by Prime Minister Narendra Modi has approved the Implementation of an Externally Aided Project namely "National Rural Economic Transformation Project (NRETP) under the Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) through loan assistance (IBRD Credit) from World Bank.

Benefits:

- The technical assistance provided by NRETP and the higher level interventions facilitated by the project will enhance the livelihoods promotion and access to finance and scale-up initiatives on digital finance and livelihood interventions.

Salient features:

- DAY-NRLM lays special emphasis on targeting the poorest of the poor and the most vulnerable communities and their financial inclusion.
- Innovative projects will be undertaken under NRETP to pilot alternate channels of financial inclusion, creating value chains around rural products, introduce innovative models in livelihoods promotion and access to finance and scale-up initiatives on digital finance and livelihoods interventions.
- DAY-NRLM provides for mutually beneficial working relationship and formal platforms for consultations between Panchayati Raj Institutions (PRIs) and Community Based Organizations (CBOs).
- NRLM has also developed activity map to facilitate convergence in different areas of interventions where NRLM institutions and PRIs could work together which has been disseminated to all state Rural Livelihood Missions.

Deen Dayal Upadhyaya Antyodaya Yojana

- ▶ It is a new scheme of the Government to replace the National Rural Livelihood Mission (Aajeevika) and National Urban Livelihood Mission implemented by Ministry of Rural Development and Ministry of Housing and Urban Poverty Alleviation respectively.

National Rural Livelihood Mission (NRLM)

- ▶ The UPA government had launched the National Rural Livelihoods Mission (NRLM) or Aajeevika in 2011 by revamping the earlier Swarnajayanti Gram Swarozgar Yojana (SGSY). This scheme is currently implemented by the Rural Development Ministry and has been renamed as Deen Dayal Antyodaya Yojana (DAY) after integration of both NULM and NRHM by NDA Government.
- ▶ NRLM is a poverty alleviation project implemented by Ministry of Rural Development, Government of India. This scheme is focused on promoting self-employment and organization of rural poor.
- ▶ The basic idea behind this programme is to organize the poor into SHG (Self Help Groups) groups and make them capable for self-employment.
- ▶ The core belief of NRLM is that the poor have innate capabilities and a strong desire to come out of poverty. They are entrepreneurial, an essential coping mechanism to survive under conditions of poverty. The challenge is to unleash their capabilities to generate meaningful livelihoods and enable them to come out of poverty.

6**PRADHAN MANTRI SHRAM YOGI MAAN-DHAN (PM-SYM) YOJANA****Context:**

- The Prime Minister launched the Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) Yojana at Vastrapur in Gujarat.
- He also distributed the PM-SYM pension cards to select beneficiaries.

About:

- The scheme will assure a monthly pension of Rs.3000 for the enrolled unorganized sector workers during their old age.
- It is for the first time since independence that such a scheme is envisaged for the crores of workers engaged in the informal sector.
- The PM-SYM along with the health coverage provided under 'Ayushman Bharat' and life & disability coverage provided under 'Pradhan Mantri Jeevan Jyoti Bima Yojana' and 'Pradhan Mantri Suraksha Bima Yojana', will ensure comprehensive social security coverage for the workers in the unorganized sector at their old age.

7**PRADHAN MANTRI UJJWALA YOJANA (PMUY)****Context:**

- Under PMUY, deposit free LPG connection is provided in the name of an adult woman member of a poor family and the beneficiary has an option to avail connection with 14.2 kg or 5 kg cylinder. The existing beneficiary with 14.2 kg LPG cylinder has an option to swap with 5 kg cylinder also.

About:

- **Mantra:** Swachh Indhan, Behtar Jeevan – Mahilaon ko mila samman
- More than 10.27 crore prospective consumers filled their **Know Your Customer (KYC)** forms under PMUY, out of which more than 7.30 crore connections have been released.
- More than one crore LPG consumers have given up their subsidy under “GiveItUp” campaign.

PMUY

- **Ministry of Petroleum and Natural Gas** had launched this scheme to provide 5 Crore deposit-free LPG (clean cooking fuel) connections to women belonging to the **Below Poverty Line (BPL)** households, which were subsequently increased to 8 Crore with a budgetary allocation of Rs. 12800 crore.

PAHAL

- Government has introduced well targeted system of subsidy delivery to LPG consumers through PAHAL. This initiative of the Government was aimed at rationalizing subsidies based on approach to cut subsidy leakages, but not subsidy per se.
- Applicable subsidy is directly transferred into the bank account of the beneficiaries. PAHAL has helped in identifying ‘ghost’ accounts, multiple accounts and inactive accounts.
- This has helped in curbing diversion of subsidised LPG to commercial purposes.

8

LAQSHYA

Context:

- Government of India has launched “**LaQshya**” (**Labour room Quality improvement Initiative**) to improve quality of care in labour room and maternity operation theatres in public health facilities.

■ Aim:

- To reduce preventable maternal and newborn mortality, morbidity and stillbirths associated with the care around delivery in Labour room and Maternity Operation Theatre and ensure respectful maternity care.
- It's a multipronged approach focused at Intrapartum and immediate postpartum period

Objectives:

- To reduce maternal and newborn mortality & morbidity due to hemorrhage, retained placenta, preterm, preeclampsia and eclampsia, obstructed labour, puerperal sepsis, newborn asphyxia, and newborn sepsis, etc.
- To improve Quality of care during the delivery and immediate post-partum care, stabilization of complications and ensure timely referrals, and enable an effective two-way follow-up system.
- To enhance satisfaction of beneficiaries visiting the health facilities and provide Respectful Maternity Care (RMC) to all pregnant women attending the public health facilities.

Following types of healthcare facilities have been identified for implementation of LaQshya program

- Government medical college hospitals.
- District Hospitals & equivalent health facilities.
- Designated FRUs and high case load CHCs with over 100 deliveries/month (60 in hills and desert areas)

9

PRADHAN MANTRI GRAM SADAK YOJANA-LLL (PMGSY-III)**Context:**

- In a major boost to rural road connectivity across the country, the Cabinet Committee on Economic Affairs, chaired by the Prime Minister Shri Narendra Modi, has given its approval for the **launch of Pradhan Mantri Gram Sadak Yojana-III (PMGSY-III)**.

Impact of the scheme:

- This would facilitate easy and faster movement to and from Gramin Agricultural Markets (GrAMs), Higher Secondary Schools and Hospitals.
- Roads constructed under PMGSY would also be maintained properly.

10

MISUSE OF EXPORT PROMOTION SCHEMES**Background:**

- Foreign Trade Policy of the Government contains certain export promotion schemes which are primarily aimed at
 - providing customs duty exemption on import of capital goods for promotion of exports
 - providing customs duty exemption on raw materials, components and consumables for manufacturing goods for exports
 - providing compensation for neutralizing the disadvantages suffered on the goods and services exported.
- All these schemes have inbuilt obligations/terms and conditions which are required to be complied by the persons availing such schemes. The Government regularly monitors such obligations.

Action against defaulters:

- In case of non-compliance, action is taken against the defaulters.
- Such actions may include suspension, cancellation of the authorization, black listing the defaulter from availing any export promotion scheme, imposition of fiscal penalty, cancellation/suspension of Importer and Exporter Code number and initiating criminal proceedings.
- Such penal provisions are contained in the Foreign Trade Policy/ Hand Book of Procedures, Foreign Trade (Development and Regulation) Act, 1992 and Foreign Trade (Regulation) Rules 1993.

11

NATIONAL CRECHE SCHEME**Context:**

- National Crèche Scheme is being implemented as a Centrally Sponsored Scheme through the States/UTs

About the scheme:

- A crèche is a facility which enables parents to leave their children while they are at work and where children are provided stimulating environment for their holistic development.
- Crèches are designed to provide group care to children, usually up to 6 years of age, who need care, guidance and supervision away from their home during the day.

Objectives:

- To provide day-care facilities for children (6 months to 6 years) of working mothers in the community.
- To improve nutrition and health status of children.
- To promote physical, cognitive, social and emotional development (Holistic Development) of children.
- To educate and empower parents /caregivers for better childcare.

12 GROUP WORK SHED SCHEME FOR POWER LOOM SECTOR

Context:

- The Government is implementing Group Work shed Scheme for Power loom sector under Power Tex India. It is in operation since 2017.

Objectives:

- To establish Group Work sheds for installation of modern looms in an existing or new cluster, which will provide required scale of economies for business operations.
- To organize power loom units in a cluster.
- To provide improved working condition in terms of more space, work environment, improve the work efficiency to enhance their competitiveness in the global market.
- Eligible beneficiaries would include weaver(s) and entrepreneur(s) associated with power loom units, including master weaver(s), registered co-operative societies of power loom weavers or any new entrepreneur(s) individually or in-group.
- Power loom unit would include weaving preparatory such as Warping, Sizing, Twisting (Two-for-one Twister and Three-for-one Twister), Texturising, Testing Laboratory and Common Facilities such as Sample Display room including stand-alone unit.

13 SKILL INDIA MISSION CELEBRATES 4TH ANNIVERSARY

Context:

- **Skill India Mission** celebrates 4th Anniversary on **World Youth Skills Day**.

About Skill India:

- It is a campaign launched by Prime Minister in 2015, which aims to train over 40 crore people in India in different skills by 2022.
- It includes various initiatives of the government like “**National Skill Development Mission**”, “**National Policy for Skill Development and Entrepreneurship, 2015**”, “**Pradhan Mantri Kaushal Vikas Yojana (PMKVY)**” and the “**Skill Loan scheme**”.

PMKVY:

- It is the flagship scheme of the **Ministry of Skill Development & Entrepreneurship**. The objective is to enable a large number of Indian youth to take up industry-relevant skill training that will help them in securing a better livelihood.
- It is applicable to any candidate of Indian nationality who is unemployed, school or college dropout, or as identified by the **Sector Skill Council** (SSC) for their respective job roles.

14 ONE NATION - ONE RATION CARD SCHEME

Context:

- To sustain the reforms brought in by scheme on 'End to End Computerization of Targeted Public Distribution System (TPDS) Operations' the Department of Food & Public Distribution has launched a new scheme namely "Integrated Management of Public Distribution System (IM-PDS)" for implementation during 2018-19 and 2019-20.

About:

- The main objective of the scheme is to introduce nation-wide portability of ration card holders under National Food Security Act, 2013 (NFSA), to lift their entitlement foodgrains from any FPS in the country without the need to obtain a new ration card, by integrating the existing PDS systems/portals of States/UTs with the Central systems/portals, etc.
- The poor migrant workers will be able to buy subsidised rice and wheat from any ration shop in the country but for that their ration cards must be linked to Aadhaar.
- Migrants would only be eligible for the subsidies supported by the Centre, which include rice sold at Rs. 3/kg and wheat at Rs. 2/kg, It would not include subsidies given by their respective state government in some other state.
- This scheme will ensure that no poor person is deprived of subsidised grains.
- The scheme can be implemented as already 77% of the ration shops across the country have PoS machines and more than 85% of people covered under the National Food Security Act (NFSA) have their cards linked to Aadhaar.
- For remaining beneficiaries, all the States have been given one more year to use point of sale (PoS) machines in the ration shops and implement the scheme

15 SABKA VISHWAS -LEGACY DISPUTE RESOLUTION SCHEME

Context:

- SabkaVishwas - Legacy Dispute Resolution Scheme is notified by the government to be operationalized from 1st September 2019.

About:

- In the Union Budget 2019-20, the Hon'ble Finance Minister announced the SabkaVishwas-Legacy Dispute Resolution Scheme, 2019. The Scheme has now been notified and will be operationalized from 1st September 2019. The Scheme would continue till 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.
- The same relief is available for cases under investigation and audit where the duty involved is quantified and communicated to the party or admitted by him in a statement on or before 30th June, 2019. Further, in cases of confirmed duty demand, where there is no appeal pending, the relief offered is 60% of the confirmed duty amount if the same is Rs. 50 lakhs or less and it is 40%, if the confirmed duty amount is more than Rs. 50 lakhs. Finally, in cases of voluntary disclosure, the person availing the Scheme will have to pay only the full amount of disclosed duty.
- 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. Government urges the taxpayers and all concerned to avail the SabkaVishwas - Legacy Dispute Resolution Scheme, 2019 and make a new beginning.

16

NATIONAL PENSION SCHEME FOR TRADERS AND SELF EMPLOYED PERSONS

Context:

- The Prime Minister of India, Shri Narendra Modi launched the National Pension Scheme for Traders and Self Employed Persons at Ranchi.

Ministry/Agency: Ministry of Labour & Employment

About:

- It is a pension scheme for the Vyaparis (shopkeepers/retail traders and self-employed persons) with annual turnover not exceeding Rs 1.5 crore.
- With this nation-wide launch, the facility for enrollment under the scheme has been made available to the prospective beneficiaries through 3.50 lakh Common Service Center (CSCs) across the country.
- The eligible Vyaparis can visit their nearest CSCs and get enrolled under the scheme. At the time of enrollment, the beneficiary is required to have an Aadhaar card and a saving bank/ Jan-dhan Account passbook only.
- GSTIN is required only for those with turnover above Rs. 40 lakhs.
- The enrolment under the scheme is free of cost for the beneficiaries.
- The enrolment is based upon self-certification.
- It is a voluntary and contributory pension scheme for entry age of 18 to 40 years with a provision for minimum assured pension of Rs 3,000/- monthly on attaining the age of 60 years.
- The beneficiary should not be income tax payer and also not a member of EPFO/ESIC/NPS (Govt.) /PM-SYM.
- The Central Government shall give 50 % share of the monthly contribution and remaining 50% contribution shall be made by the beneficiary.
- The monthly contribution is kept low to make it affordable. For example, a beneficiary is required to contribute as little as Rs.100/- per month at a median entry age of 29 years.

- This scheme will target enrolling 25 lakh subscribers in 2019-20 and 2 crore subscribers by 2023-2024. An estimated 3 crore Vyaparis in the country are expected to be benefitted under the pension scheme.

17 YOUTH CO:LAB

Context:

- In a latest initiative to recognize young people as critical drivers of sustainable development, Atal Innovation Mission (AIM), NITI Aayog and United Nations Development Programme (UNDP) India have launched Youth Co:Lab.

About:

- It aims at accelerating social entrepreneurship and innovation in young India.
- Through Youth Co:Lab, young entrepreneurs and innovators will get a chance to connect with governments, mentors, incubators and investors, who will help equip them with entrepreneurial skills.
- The initiative will also convene a series of youth dialogues across several cities such as New Delhi, Hyderabad, Bangalore and Mumbai to promote entrepreneurship across India.
- AIM and UNDP, as part of UNSDF signed between NITI Aayog and UN India, are collaborating to spread awareness about different issues pertaining to youth, the future of work and the Sustainable Development Goals (SDG) through Youth Co:Lab.
- The first phase of Youth Co:Lab will focus on six SDGs: SDG 5 (Gender Equality), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 12 (Sustainable Consumption and Production) and SDG 13 (Climate Action).
- Targeted at supporting young people overcome challenges, UNDP and AIM, NITI Aayog will empower young people through innovative development ideas.
- In this regard, Youth Co:Lab will convene social innovation challenges at the national and sub-national level, which will invite young people in the age group of 18-29 years and start-ups to showcase their proposed ideas and solutions to tackle some of the region's biggest social challenges.
- They will also get the opportunity to pitch their ideas at UNDP's regional centre in 2020.
- Selected applicants will be invited for a national innovation challenge, where each winning start-up will get an opportunity to incubate and strengthen their ideas at the Atal Incubation Centres.

About Youth Co:Lab

- Co-created in 2017 by UNDP and the Citi Foundation, and operational in 25 countries across the Asia Pacific region, the Youth Co:Lab initiative aims to create an enabling ecosystem to promote youth leadership, innovation, and social entrepreneurship.

About Atal Innovation Mission (AIM)

- AIM including Self-Employment and Talent Utilisation (SETU) is Government of India's endeavour to promote a culture of innovation and entrepreneurship. Its objective is to serve as a platform for the promotion of world-class innovation hubs, grand challenges, start-up businesses and other self-employment activities, particularly in technology driven areas.

18 MAHATMA GANDHI NATIONAL FELLOWSHIP PROGRAMME

Context:

- To boost skill development at the district level, the Ministry of Skill Development and Entrepreneurship (MSDE) signed a contract with the Indian Institute of Management (IIM) Bangalore for introducing a two-year fellowship programme Mahatma Gandhi National Fellowship (MGNF) programme.

About:

- Programme aims to provide academic inputs and field experience to understand and contribute to the creation of a district level skill development ecosystem.
- Programme is launched in 75 districts across Gujarat, Karnataka, Meghalaya, Rajasthan, Uttar Pradesh and Uttarakhand.
- Designed under Skills Acquisition and Knowledge Awareness for Livelihood Promotion (SANKALP) the fellowship aims to address the challenge of non-availability of personnel for implementation of various programmes at national, state and district levels.
- Eligible fellows for the programme have to be in 21-30 years age-group, have a graduation degree from a recognized university and be citizens of India. Proficiency in official language of state of fieldwork will be mandatory.
- MGNF seeks to create a cadre of young individuals and train them in a blended academic programme that provides both academic inputs and a component of field immersion at the district level.
- Besides allowing for an immersive experience to fellows under the programme, MGNF will also be an attractive proposition for those who wish to eke a career in public policy.
- This ensures participation of a larger community for local merit good.
- In the course of their training, fellows will work under the close supervision of state skill development missions (SSDM) and will spend time and effort in understanding skilling challenges and gaps in the district.
- They are expected to enrich skilling programmes by bringing in fresh thinking to local planning, execution, community interaction and outcome management.
- Fellows will receive a stipend of Rs. 50,000 in the first year and Rs. 60,000 in the second year. On completion of their engagement, they will be awarded a Certificate in Public Policy and Management from IIM Bangalore.

About SANKALP:

- Launched by the Government in January 2018, **SANKALP** is a World Bank loan assisted project that aims to strengthen institutional mechanisms for skill development and increase access to quality and market-relevant training for youth across the country.
- Four key result areas have been identified under SANKALP
 - Institutional Strengthening.
 - Quality Assurance.
 - Inclusion.
 - Expanding Skills through PPPs.

19

SABKA VISHWAS – LEGACY DISPUTE RESOLUTION SCHEME

- 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 main components of the Scheme **are dispute resolution and amnesty.**
- The Government has enhanced the monetary limits for filing of appeal by the department in Central Excise and Service Tax cases. Further, **two benches in the Supreme Court and one bench each in the High Courts of Delhi, Gujarat, Mumbai and Madras have been constituted to hear taxation matters.**
- The **scheme is in force from 1.09.2019 till 31.12.2019.** The scheme will be **implemented by Ministry of Finance.**

20 DUAL TRAINING SYSTEM (DST)

- The scheme of Dual System of Training has had a significant impact on the skilling ecosystem after it was recently revamped.
- The DST combines theoretical training from ITIs and practical training from Industry Partners thereby strengthening industry linkages and providing hand-on experience to students on industries latest technologies and techniques.
- The revised DST Scheme meets the industry's skilled workforce requirements with greater adaptability towards industry expectations and wider coverage of Industrial Training Institutes (ITIs). After the successful completion of training, trainees are awarded National Trade Certificate (NTC) that gives them an edge with regard to employability.
- The significant changes in the now introduced revamped DST scheme include:
 - Both Govt & Private ITI Principals are empowered to sign MoUs with industry without interference of DGT or States.
 - The eligibility criteria for industry participation has been eased for both engineering trades and non-engineering trade,
 - The minimum turnover requirement of industry has been brought down.
 - The duration of the practical training of the course has also been made flexible and adaptive to the industry schedule.
 - All the 138 courses under Craftsman Training Scheme have been brought under the ambit of DST, as against only 17 courses earlier.

21 MINISTRY OF CIVIL AVIATION LAUNCHES ROUND 4 OF RCS- UDAN

- Following the three successful rounds of bidding, the Ministry of Civil Aviation has launched the 4th round of Regional Connectivity Scheme (RCS)- UdeDeshKaAamNagrik(UDAN) to further enhance the connectivity to remote and regional areas of the country. Focus of this round would be the priority areas like NER, Hilly States, J&K, Ladakh and Islands. Some of the key features of the Scheme are:
 - **Revision of (Viability Gap Funding) VGF cap** – The provision of VGF for Category 2 / 3 aircraft (more than 20 seater) has been enhanced for operation of RCS flights in Priority Area(s) (Union Territories [UT] of Ladakh and Jammu & Kashmir; the States of Himachal Pradesh, Uttarakhand, North Eastern State; UT of Lakshadweep and Andaman & Nicobar). The VGF cap applicable for various stage lengths for operation through category 1 / 1 A aircraft (below 20 seater) has also been revised to further incentivize the operation of small aircraft under the Scheme.
 - **Promoting short-haul routes** – The provision of VGF would be restricted for routes with stage length up to 600 kms, for operation of Category 2 / 3 aircraft, beyond it no monetary support would be provided. The table for provision of VGF for various stage lengths would be available for stage length up to 500 kms.
 - **Well defined Prioritization framework** – Airports that has already been developed by AAI would be given higher priority for award of VGF under the Scheme, followed by airports not part of the above list but located Priority Area(s) would be given a priority, followed by airports located in areas other than Priority Area(s).
 - **Flexibility to change the frequency of flight operation** - The Selected Airline Operator (SAO) would be allowed to change the frequency of flight operation, during the tenure of flight operation of the given route, provided that the total scheduled flight operation submitted as part of the Technical Proposal, is conformed and adhered to within a period of one year.

- Inclusion of helicopter and sea plane operation under NSOP license – The operation of helicopter and sea plane would be allowed under this round.
- MoCA aims to operationalize 1000 routes and more than 100 airports in the next five years. This would be achieved by focusing on operationalizing routes in Priority Areas. AAI would focus on developing no-frills airport in the future and routes connecting such airports would be prioritized for award of VGF. The market would be incentivized to develop short haul routes only, providing connectivity to nearby airports.

22 BHARATIYA POSHAN KRISHI KOSH

- Ministry of Women and Child Development along with Bill & Melinda Gates Foundation (BMGF) announced the Bharatiya Poshan Krishi Kosh (BPKK) in New Delhi.
- Bharatiya Poshan Krishi Kosh" project has two components – Development of a Food Atlas and Documentation of promising practices for Jan-Andolan for POSHAN Abhiyaan.
- The Agro-Food Atlas is to act as a repository of diverse crops across 127 agro-climatic zones of the country having three parts- crops currently being grown, agro-ecological conditions (soil, organic carbon content, ground water availability etc) and guidance on how a greater diversity of crops could be encouraged in a particular district or block to promote dietary diversity and nutrition.
- The project includes diverse data sources like National Sample Survey, Agri-Census, Soil Health Cards, ISRO's Advanced Wide Field Sensor (AWiFS) and National Aeronautics and Space Administration's (NASA's) Moderate Resolution Imaging Spectro-Radio meter.
- The project also documents social, behavioral and cultural practices that promote and reinforce healthy dietary behaviors. Identification of promising practices with the help of a multi-disciplinary group of experts and developments of a tool kit to disseminate best strategies for Social and Behavioural Change Communication, specific to population groups in those regions is also a part of it.
- A Technical Support Unit has been set-up under NITI Aayog which undertakes/conducts/ facilitates regular monitoring and evaluation of the National Nutrition Mission to assess the impact of the programme. A National Council on India's Nutritional Challenges under the Chairmanship of Vice-Chairman NITI Aayog has been constituted to provide policy direction, review and effective coordination and convergence between Ministries which have a sectoral responsibility for the challenge of nutrition.
- Ministry of WCD is addressing the issue of malnutrition through various schemes including POSHAN Abhiyaan. Under POSHAN Abhiyaan, Community Mobilization and Awareness Advocacy leading to Jan Andolan, to educate the people on nutritional aspects, are among various components to generate awareness and public participation.

Atal Bhujal Yojana:

- The Union Cabinet has given its approval for the implementation of the Atal Bhujal Yojana (ATAL JAL), a Central Sector Scheme to be implemented over a period of 5 years (2020-21 to 2024-25).
- The scheme aims to improve groundwater management through community participation in identified priority areas in seven States, viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh.
- ATAL JAL will promote panchayat led groundwater management and behavioural change with a primary focus on demand-side management
- ATAL JAL has two major components:
 - **Institutional Strengthening and Capacity Building Component** for strengthening institutional arrangements for sustainable groundwater management in the States including improving monitoring networks, capacity building, strengthening of Water User Associations, etc.
 - **Incentive Component** for incentivising the States for achievements in improved groundwater management practices namely, data dissemination, preparation of water security plans, implementation of management interventions through the convergence of ongoing schemes, adopting demand-side management practices etc.

23

SOIL HEALTH CARD SCHEME

- Soil Health Card (SHC) is a Government of India's scheme promoted by the Department of Agriculture & Co-operation under the Ministry of Agriculture and Farmers' Welfare.
- It is being implemented through the Department of Agriculture of all the State and Union Territory Governments. A SHC is meant to give each farmer soil nutrient status of his/her holding and advice him/her on the dosage of fertilizers and also the needed soil amendments, that s/he should apply to maintain soil health in the long run.
- SHC is a printed report that a farmer will be handed over for each of his holdings.
- It will contain the status of his soil with respect to 12 parameters, namely N,P,K (Macro-nutrients) ; S (Secondary- nutrient) ; Zn, Fe, Cu, Mn, Bo (Micro - nutrients) ; and pH, EC, OC (Physical parameters).
- Based on this, the SHC will also indicate fertilizer recommendations and soil amendment required for the farm.
- The card will contain an advisory based on the soil nutrient status of a farmer's holding.
- It will show recommendations on dosage of different nutrients needed. Further, it will advise the farmer on the fertilizers and their quantities he should apply, and also the soil amendments that he should undertake, so as to realize optimal yields.

24

ELECTRONICS MANUFACTURING CLUSTERS (EMC 2.0) SCHEME:

- The Union Cabinet has approved financial assistance to the **Modified Electronics Manufacturing Clusters (EMC2.0) Scheme** for development of world class infrastructure along with common facilities and amenities through Electronics Manufacturing Clusters (EMCs).

What is EMC2.0 Scheme?

- The Modified Electronics Manufacturing Clusters (EMC 2.0) Scheme would support setting up of both Electronics Manufacturing Clusters (EMCs) and Common Facility Centers (CFCs).
- For the purpose of this Scheme, an Electronics Manufacturing Cluster (EMC) would set up in geographical areas of certain minimum extent, preferably contiguous, where the focus is on development of basic infrastructure, amenities and other common facilities for the ESDM units.
- For Common Facility Centre (CFC), there should be a significant number of existing ESDM units located in the area and the focus is on upgrading common technical infrastructure and providing common facilities for the ESDM units in such EMCs, Industrial Areas/Parks/Industrial corridors.

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ECONOMY

1

AMALGAMATION OF VIJAYA, DENA AND BANK OF BARODA

Context:

- Cabinet approves first-ever three way merger in Indian Banking with amalgamation of Vijaya, Dena and Bank of Baroda.

About:

- The Union Cabinet chaired by Prime Minister Shri Narendra Modi has approved the scheme of amalgamation for amalgamating Bank of Baroda, Vijaya Bank and Dena Bank, with Bank of Baroda as the transferee bank and Vijaya Bank and Dena Bank as transferor banks.
- The amalgamation will be the first-ever three-way consolidation of banks in India, with the amalgamated bank being India's second largest Public Sector Bank.
- The amalgamation will help create a strong globally competitive bank with economies of scale and enable realisation of wide-ranging synergies. Leveraging of networks, low-cost deposits and subsidiaries of the three banks has the potential of yielding significant synergies for positioning the consolidated entity for substantial rise in customer base, market reach, operational efficiency, wider bouquet of products and services, and improved access for customers.

Key points of the Scheme of Amalgamation:

- Vijaya Bank and Dena Bank are transferor banks and BoB is transferee bank.
- The scheme shall come into force on 1.4.2019.
- Upon commencement of the scheme, the undertakings of the transferor banks as a going concern shall be transferred to and shall vest in the transferee bank, including, inter alia, all business, assets, rights, titles, claims, licenses, approvals and other privileges and all property, all borrowings, liabilities and obligations.
- Every permanent and regular officer or employee of the transferor banks shall become an officer or employee and shall hold his office or service therein in the transferee bank such that the pay and allowance offered to the employees/officers of transferor banks shall not be less favourable as compared to what they would have drawn in the respective transferor bank.
- The Board of the transferee bank shall ensure that the interests of all transferring employees and officers of the transferor bank are protected.
- The transferee bank shall issue shares to the shareholders of transferor banks as per share exchange ratio. Shareholders of the transferee bank and transferor banks shall be entitled to raise their grievances, if any, in relation to the share exchange ratio, through an expert committee.

Some of the strengths of the envisaged amalgamated entity are:

- The amalgamated bank will be better equipped in the changing environment to meet the credit needs of a growing economy, absorb shocks and capacity to raise resources.
- It would also enable creation of a bank with scale comparable to global banks and capable of competing effectively in India and globally.
- The amalgamated banks will have access to a wider talent pool, and a large database that may be leveraged through analytics for competitive advantage in a rapidly digitalising banking context.
- Public at large shall benefit in terms of enhanced access to banking services through a stronger network, the ability to support a wider offering of product and services, and easy access to credit.

2

OPEN ACREAGE LICENSING PROGRAMME**Context:**

- Union Minister of Petroleum and Natural Gas & Skill Development and Entrepreneurship launched NIO and MRSC for Open Acreage Licensing Programme (OALP) Bid Round-II.

About:

- In this bid round, 14 E&P blocks, with an area of approximately 30,000 sq. km., are being offered for bidding to the investor community under the investor friendly HELP regime.
- 10 blocks are based on Expressions of Interest submitted by the bidders, and 4 blocks have been carved out by the Government based on data received through the National Seismic Programme and the Resource Reassessment Study carried out by the Government.
- Almost 60,000 sq km area was offered under OALP Bid round I and 30,000 sq km more is being offered under the second round, while the third round is almost ready.
- Earlier the decision about exploration was based on the potential Government revenue, but didn't yield many results. Now, the Government is working to increase production. For this purpose, IOR/EOR has been announced; production enhancement contract model is being worked out.
- The first bidding round under OALP (Bid Round I) was launched in January 2018 and closed in May 2018 and 55 blocks covering 59,282 sq. km. area were awarded in October 2018. The Government is also in advanced stages of finalizing the OALP Bid Round III with approximately 32,000 sq. km. of area and the bidding is expected to be launched within next few weeks.

The Directorate General of Hydrocarbon (DGH)

- It is the Indian governmental regulatory body under the Gas. The Directorate General of Hydrocarbons (DGH) was established in 1993 under the administrative control of Ministry of Petroleum and Natural Gas through Government of India Resolution. Objectives of DGH are to promote sound management of the oil and natural gas resources having a balanced regard for environment, safety, technological and economic aspects of the petroleum activity.

Open Acreage Licensing (OALP)

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

Hydrocarbon exploration and licensing policy, 2016 (HELP)

- It is the new exploration and production policy of the Government of India in the hydrocarbon sector. The government adopted the HELP in March 2016 in place of the New Exploration Licensing Policy 1997 (NELP) includes:
 - Uniform license for exploration and production of all forms of hydrocarbon such as coal bed methane, shale gas and oil, tight gas and gas hydrates.

- an open acreage policy that allows companies to select the exploration blocks on their own without waiting for the formal bidding round from the government.
- Easy to administer revenue sharing model as the government needs to audit only the production and revenue of companies (not costs). The subjective criterion of cost recovery has ended.
- Marketing and pricing freedom for the crude oil and natural gas produced.

National Data Repository (NDR)

- ▶ It is a data bank that seeks to preserve and promote a country's natural resources data, particularly data related to the petroleum exploration and production (E&P) sector.
- ▶ A National Data Repository is normally established by an entity that governs, controls and supports the exchange, capture, transference and distribution of E&P information, with the final target to provide the State with the tools and information to assure the growth, govern-ability, control, independence and sovereignty of the industry.

3 E-NAM

Context:

- E-NAM has achieved milestone by commencing inter-State trade between mandis using e-payments.

About:

- Earlier trade used to happen either within the APMC or between two APMCs situated within same state.
- The very first Inter State transaction in tomatoes has been carried out between trader of Bareilly e-NAM APMC of Uttar Pradesh and farmer of Haldwani e-NAM APMC of Uttarakhand. Similarly, the inter-State transactions in potatoes, brinjal & cauliflower have been carried out between the e-NAM mandis of Uttarakhand & Uttar Pradesh.
- In all the cases, e-payments have been made through e-NAM portal. This will helps farmers get better market access, more buyers/ traders & realise better prices for their produce.
- To facilitate inter State trade between the e-NAM States, Ministry of Agriculture & Farmers' Welfare, Government of India, conducted series of coordination meetings with concerned States and Mandi board officials/ Mandi secretaries. As a result of these interactions, both the States have now facilitated licensing of traders of each other for inter-State trade on e-NAM portal.

E-NAM:

- E-NAM i.e. National Agriculture Market is a pan-India electronic trading (e-trading) portal which seeks to network the existing physical regulated wholesale market (known as APMC market) through a virtual platform to create a unified national market for agricultural commodities.
- E-NAM platform promotes better marketing opportunities for the farmers to sell their produce through online competitive and transparent price discovery system and online payment facility. It also promotes prices commensurate with quality of produce.
- The e-NAM portal provides single window services for all APMC related information and services. This includes commodity arrivals, quality & prices, buy & sell offers & e-payment settlement directly into farmers' account, among other services.
- Farmers can access the information on e-NAM easily through their mobile phones from anywhere. This online trading platform aims at reducing transaction costs, bridging information asymmetry and helps in expanding the market access for farmers.

- “Logistic providers” information is also being provided in the e-NAM portal to traders from outside the State, which will facilitate transportation of commodities after trading. An Inter-State dashboard on e-NAM platform has been developed to promote inter State trade among e-NAM States.

4

STATUS PAPER ON RESOURCE EFFICIENCY & CIRCULAR ECONOMY**Context:**

- NITI Aayog unveiled the “Status Paper and Way Forward on Resource Efficiency & Circular Economy” and “Four Sectoral Strategy Papers on Resource Efficiency on Steel, Aluminium, Construction & Demolition Waste, Secondary Materials Management in Electrical & Electronics Sector”.
- This event was hosted in collaboration with Ministry of Environment, Forest and Climate Change and the European Union delegation to India.

About:

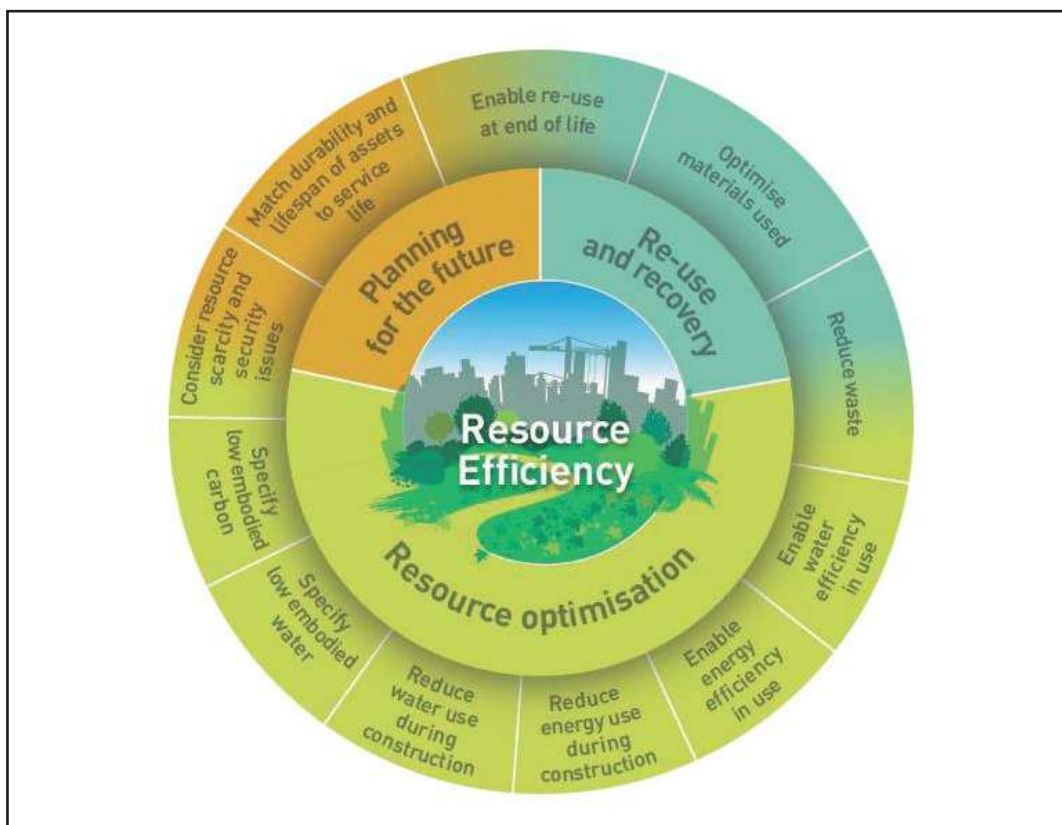
- NITI Aayog had undertaken the role of a facilitator to mainstream the approaches and measures related in the direction of resource efficient and circular Indian Economy.
- This was also in line with the Government’s commitment to the goals of sustainability.
- The status paper brings out 30 recommendations out of which 14 recommendations have identified as priority actions. It also spelt out a few notable actions for transformation of RE Ecosystem in India. These are:
 - Formulation of a National Policy on RE/CE
 - Establishment of Bureau of Resource Efficiency (BRE)
 - Mainstreaming RE&CE in existing flagship missions
 - A Modern Recycling Industry with level playing between primary and secondary producers
 - R&D for development of scalable technologies for RE & C
 - Development and promotion of skill and capacity building programmes for informal sector

Resource efficiency

It means using the Earth’s limited resources in a sustainable manner while minimising impacts on the environment. It allows us to create more with less and to deliver greater value with less input.

Circular Economy:

- Looking beyond the current take-make-dispose extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system.
- Underpinned by a transition to renewable energy sources, the circular model builds economic, natural, and social capital. It is based on three principles:
 - Design out waste and pollution
 - Keep products and materials in use
 - Regenerate natural systems



5 BABA KALYANI GROUP REPORT ON SEZ POLICY

Context:

- Commerce Ministry Invites Suggestions on Baba Kalyani Group Report on SEZ Policy.

Background:

- The Union Government has set the target of creating 100 million jobs and achieving 25 per cent of GDP from the manufacturing sector by 2022, as a part of its flagship 'Make in India' programme. The Government also plans to increase manufacturing value to USD 1.2 trillion by 2025.
- While these are ambitious plans to propel India into a growth trajectory, it requires an evaluation of existing policy frameworks to catalyse manufacturing sector growth. At the same time, the policy needs to be compiled with the relevant WTO regulations.

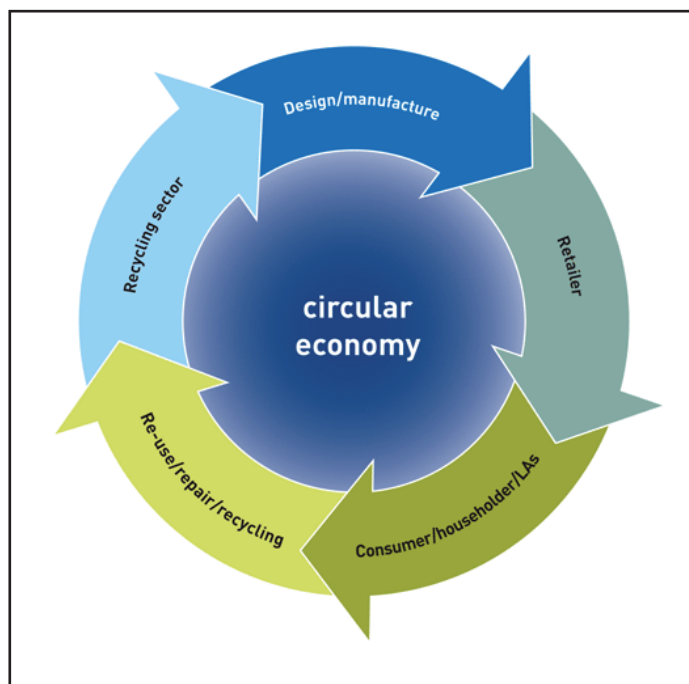
About:

- In June 2018, Baba Kalyani committee was tasked to make special economic zone (SEZ) policy compatible with World Trade Organisation (WTO) rules after the US challenged India's export subsidy programme at the multilateral trade body.
- In June 2018, Baba Kalyani committee was tasked to make special economic zone (SEZ) policy compatible with World Trade Organisation (WTO) rules after the US challenged India's export subsidy programme at the multilateral trade body.
- India's SEZ Policy was implemented from April 1, 2000. Subsequently, the Special Economic Zones Act, 2005 was enacted.

- The commerce ministry has been consistently lobbying with the finance ministry to exempt units in the SEZs from the minimum alternate tax (MAT), imposed on them in 2011.

Key Objectives of the Committee included:

- To evaluate the SEZ policy and make it WTO compatible.
- To suggest measures for maximising utilisation of vacant land in SEZs.
- To suggest changes in the SEZ policy based on international experience.
- To merge the SEZ policy with other Government schemes such as coastal economic zones, Delhi-Mumbai industrial corridor, national industrial manufacturing zones and food and textiles parks.



Key Highlights of the Report:

- If India is to become a US \$5 trillion economy by 2025, then the current environment of manufacturing competitiveness and services has to undergo a basic paradigm shift.
- The report notes that the success seen by services sectors like IT and ITES (IT enabled services) has to be promoted in other services sector like health care, financial services, legal, repair and design services.

6

GOODS AND SERVICES TAX APPELLATE TRIBUNAL (GSTAT)

Context:

- The Union Cabinet, chaired by the Prime Minister Shri Narendra Modi, has approved the creation of National Bench of the Goods and Services Tax Appellate Tribunal (GSTAT).

About:

- The National Bench of the Appellate Tribunal shall be situated at New Delhi. GSTAT shall be presided over by its President and shall consist of one Technical Member (Centre) and one Technical Member (State).
- Goods and Services Tax Appellate Tribunal is the forum of second appeal in GST laws and the first common forum of dispute resolution between Centre and States.
- The appeals against the orders in first appeals issued by the Appellate Authorities under the Central and State GST Acts lie before the GST Appellate Tribunal, which is common under the Central as well as State GST Acts.
- Being a common forum, GST Appellate Tribunal will ensure that there is uniformity in redressal of disputes arising under GST, and therefore, in implementation of GST across the country.
- Chapter XVIII of the CGST Act provides for the Appeal and Review Mechanism for dispute resolution under the GST Regime.
- Section 109 of this Chapter under CGST Act empowers the Central Government to constitute, on the recommendation of Council, by notification, with effect from such date as may be specified therein, an Appellate Tribunal known as the Goods and Services Tax Appellate Tribunal for hearing appeals against the orders passed by the Appellate Authority or the Revisional Authority.

Goods and Services Tax (GST)

- ▶ It is an indirect tax (or consumption tax) levied in India on the supply of goods and services. GST is levied at every step in the production process, but is meant to be refunded to all parties in the various stages of production other than the final consumer.
- ▶ Goods and services are divided into five tax slabs for collection of tax - 0%, 5%, 12%, 18% and 28%. However, Petroleum products, alcoholic drinks, electricity, are not taxed under GST and instead are taxed separately by the individual state governments, as per the previous tax regime.

GST Council

- ▶ GST Council is the governing body of GST having 33 members. GST Council is an apex member committee to modify, reconcile or to procure any law or act or regulation based on the context of goods and services tax in India. The council is headed by the union finance minister assisted with the finance minister of all the states of India. The GST council is responsible for any revision or enactment of rule or any rate changes of the goods and services in India.

Goods and Services Tax Network (GSTN)

- ▶ "Goods and Services Tax" Network (GSTN) is a nonprofit organisation formed for creating a sophisticated network, accessible to stakeholders, government and taxpayers to access information from a single source (portal).
- ▶ The GSTN software is developed by Infosys Technologies and the Information Technology network that provides the computing resources is maintained by the NIC.

7

GEMS AND JEWELLERY DOMESTIC COUNCIL

Context:

- An Ad-hoc National Committee of Domestic Council for Gems and Jewellery consisting 14 members representing various associations of Gems and Jewellery Sector has been constituted to draft Memorandum and Article of Association and other Rules/Bye-laws of the Domestic Council.

About:

- The Government is supporting the process of setting up of Domestic Council for Gems and Jewellery, to encourage and boost domestic gems and jewellery sector.
- It is envisaged that the domestic industry would be benefited from such a representative body which would be the forum for highlighting the issues and concerns of the industry that require redressal through policy measures.

To strengthen the Gems & Jewellery industry, the Government has taken following steps:

- establishment of Special Notified Zone (SNZ);
- setting up of Common Facility Centres for gem and jewellery sector;
- announcement of separate ITC HS Code for lab-grown diamonds;
- and providing financial assistance for participation in international fairs,
- organizing buyer-seller meets,
- creation of export related infrastructure, etc. under various schemes of the Department of Commerce to boost the industry.

8

EXPORT PROMOTION CAPITAL GOODS (EPCG) SCHEME**Context:**

- Central Government has been implementing the Export Promotion Capital Goods Scheme to facilitate import of capital goods for producing quality goods and services and enhance India's manufacturing competitiveness.
- It falls under the Foreign Trade Policy for manufacturer exporters with or without supporting manufacturer(s), merchant exporters tied to supporting manufacturer(s) and service providers.

About:

- Under the Scheme, EPCG Authorizations are issued with actual user condition and import validity of 24 months to import capital goods (except those specified in negative list) for pre-production, production and post-production at zero customs duty, and subject to fulfilment of specific Export Obligation equivalent to 6 times of duties, taxes and cess saved on capital goods, to be fulfilled in 6 years from date of issue of Authorization.
- In addition, the Authorization holder is required to fulfil Average Export Obligation achieved by him in the preceding three licensing years for the same and similar products. However, if minimum 75% of specific Export Obligation and 100% of Average Export Obligation is fulfilled within half the original export obligation period, remaining export obligation can be condoned.
- Further, in case of indigenous sourcing of capital goods and for exports of Green Technology products, specific EO is only 75%. For Units located in North East Region and Jammu & Kashmir, specific EO is only 25%.

9

NATIONAL INSTITUTES OF FOOD TECHNOLOGY, ENTREPRENEURSHIP AND MANAGEMENT BILL, 2019**Context:**

- The Union Cabinet has approved the introduction of National Institutes of Food Technology, Entrepreneurship and Management Bill, 2019.

About:

- The objective of the bill is to confer the status of Institutions of National Importance to National Institute of Food Technology, Entrepreneurship and Management (NIFTEM) at Kundli, Haryana, and the Indian Institute of Food Processing Technology (IIFPT) at Thanjavur, Tamil Nadu.

Benefits:

- The legislation would provide for functional autonomy to the institutes to design and develop courses, undertake research activities and leverage enhanced status in their academic pursuits, so that they become world class institutes.
- The institutes would implement the reservation policy of the Government and would also undertake special outreach activities for the benefits of concerned stakeholders.
- It would enable the institutes to provide world class teaching and research experience by adopting innovative practices

10

INTERNATIONAL FINANCIAL SERVICES CENTRES AUTHORITY BILL, 2019

Context:

- The Union Cabinet has approved establishment of a unified authority for regulating all financial services in International Financial Services Centres (IFSCs) in India through International Financial Services Centres Authority Bill, 2019.

About:

- The first IFSC in India has been set up at GIFT City, Gandhinagar, Gujarat. An IFSC enables bringing back the financial services and transactions that are currently carried out in offshore financial centers by Indian corporate entities and overseas branches / subsidiaries of financial institutions (FIs) to India by offering business and regulatory environment that is comparable to other leading international financial centers in the world like London and Singapore.
- It would provide Indian corporates easier access to global financial markets. IFSC would also complement and promote further development of financial markets in India.

Main features of the Bill:

- Management of the Authority:** The Authority shall consist of a Chairperson, one Member each to be nominated by the Reserve Bank of India (RBI), the Securities Exchange Board of India (SEBI), the Insurance Regulatory and Development Authority of India (IRDAI) and the Pension Fund Regulatory and Development Authority (PFRDA), two members to be nominated by the Central Government and two other whole-time or full-time or part-time members.
- Functions of the Authority:** The Authority shall regulate all such financial services, financial products and FIs in an IFSC which has already been permitted by the Financial Sector Regulators for IFSCs. The Authority shall also regulate such other financial products, financial services or FIs as may be notified by the Central Government from time to time. It may also recommend to the Central Government such other financial products, financial services and financial institutions which may be permitted in the IFSCs.
- Powers of the Authority:** All powers exercisable by the respective financial sector regulatory (viz. RBI, SEBI, IRDAI, and PFRDA etc.) under the respective Acts shall be solely exercised by the Authority in the IFSCs in so far as the regulation of financial products, financial services and FIs that are permitted in the IFSC are concerned.
- Processes and procedures of the Authority:** The processes and procedures to be followed by the Authority shall be governed in accordance with the provisions of the respective Acts of Parliament of India applicable to such financial products, services or institutions, as the case may be.
- Grants by the Central Govt.:** The Central Govt. may, after due appropriation made by Parliament by law in this behalf, make to the Authority grants of such sums of money as the Central Government may think fit for being utilized for the purposes of the Authority.
- Transactions in foreign currency:** The transactions of financial services in the IFSCs shall be done in the foreign currency as specified by the Authority in consultation with the Central Govt.

11

CREDIT LINKED CAPITAL SUBSIDY AND TECHNOLOGY UP-GRADATION SCHEME

Context:

- Cabinet approves continuation of Credit Linked Capital Subsidy and Technology Up-gradation Scheme (CLCS-TUS) beyond 12th Plan for three years from 2017-18 to 2019-20.

About:

- This scheme aims at improving the competitiveness of MSMEs by integrating various ongoing schematic interventions aimed at up-grading technology through Credit Linked Capital Subsidy (CLCS), hand holding for zero defect zero effect manufacturing (ZED), increasing productivity through waste reduction (Lean), design intervention (Design), cloud computing (Digital MSMEs), facilitation of intellectual property (IPR) and nurturing new ideas (Incubation).
- The scheme would be demand driven. But its coverage has been made more inclusive.
- In addition, the scheme through Zero Defect & Zero Effect, component will promote reduction in emission level of green house gases and improve the competitiveness through reduction in defect / wastage during the manufacturing process of the products. It will also promote the innovation, digital empowerment of MSMEs, design interventions and support the protection of intellectual property of MSMEs.
- The scheme will facilitate technology up-gradation to MSEs, improvement in Quality of products by MSMEs, enhancement in productivity, reduction in waste and shall promote a culture of continuous improvement.

Zero Defect, Zero Effect

- ZED Scheme aims to rate and handhold all MSMEs to deliver top quality products using clean technology.
- It will have sector-specific parameters for each industry.
- MSME sector is crucial for the economic progress of India and this scheme will help to match global quality control standards.
- The scheme will be cornerstone of the Central Government's flagship Make in India programme, which is aimed at turning India into a global manufacturing hub, generating jobs, boosting growth and increase income.

12**AMENDMENT TO THE SPECIAL ECONOMIC ZONES ACT, 2005****Context:**

- The Union Cabinet, chaired by the Prime Minister has approved promulgation of an Ordinance to amend the definition of "person", as defined in sub-section (v) of section 2 of the Special Economic Zones Act, 2005 (28 of 2005) to include a trust, to enable the setting up of a unit in a Special Economic Zone by a trust, as also to provide flexibility to the Central Government to include in this definition of a person, any entity that the Central Government may notify from time to time.

Impact:

- The present provision of the SEZs Act, 2005 do not permit 'trusts' to set up units in SEZs. The amendment will enable a trust to be considered for grant of permission to set up a unit in SEZs.
- The amendment will also provide flexibility to the Central Government to include in this definition of a person, any entity that the Central Government may notify from time to time.
- This will facilitate investments in Special Economic Zones.

Special economic zone (SEZ):

- Special Economic Zone (SEZ) is a specifically delineated duty free enclave and shall be deemed to be foreign territory for the purposes of trade operations and duties and tariffs in India.

- ▶ Within SEZs, units may be set-up for the manufacture of goods and other activities, including processing, assembling, trading, repairing, reconditioning, making of gold/silver, platinum jewellery, etc.
- ▶ As per law, SEZ units are deemed to be outside the customs territory of India. Goods and services coming into SEZs from the domestic tariff area or DTA are treated as exports from India and goods and services rendered from the SEZ to the DTA are treated as imports into India.
- ▶ India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla in 1965.
- ▶ The Special Economic Zone Act, 2005 came into force with effect from 2006. The SEZs Rules, inter-alia, provide for drastic simplification of procedures and for single window clearance on matters relating to central as well as state governments.

13 GI CERTIFICATION FOR FIVE VARIETIES OF INDIAN COFFEE

Context:

- The Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India recently awarded Geographical Indication (GI) to five varieties of Indian coffee.

About:

■ Coffee Varieties which have been awarded GI tag

- **Coorg Arabica coffee:** It is grown specifically in the region of Kodagu district in Karnataka.
- **Wayanaad Robusta coffee:** It is grown specifically in the region of Wayanad district which is situated on the eastern portion of Kerala.
- **Chikmagalur Arabica coffee:** It is grown specifically in the region of Chikmagalur district and it is situated in the Deccan plateau, belongs to the Malnad region of Karnataka.
- **Araku Valley Arabica coffee:** It can be described as coffee from the hilly tracks of Visakhapatnam district of Andhra Pradesh and Odisha region at an elevation of 900-1100 Mt MSL. The coffee produce of Araku, by the tribals, follows an organic approach in which they emphasise management practices involving substantial use of organic manures, green manuring and organic pest management practices.
- **Bababudangiris Arabica coffee:** Grown specifically in the birthplace of coffee in India and the region is situated in the central portion of Chikmagalur district. Selectively hand-picked and processed by natural fermentation, the cup exhibits full body, acidity, mild flavour and striking aroma with a note of chocolate. This coffee is also called high grown coffee which slowly ripens in the mild climate and thereby the bean acquires a special taste and aroma.

■ Facts related to coffee cultivation in India

- In India, coffee is cultivated in about 4.54 lakh hectares by 3.66 lakh coffee farmers of which 98% are small farmers. Coffee cultivation is mainly done in the Southern States of India:
 - Karnataka – 54%
 - Kerala – 19%
 - Tamil Nadu – 8%
- Coffee is also grown in non-traditional areas like Andhra Pradesh and Odisha (17.2%) and North East States (1.8%).
- India is the only country in the world where the entire coffee cultivation is grown under shade, hand-picked and sun dried. India produces some of the best coffee in the world, grown by tribal farmers in the Western and Eastern Ghats, which are the two major bio-diversity hotspots in the world. Indian coffee is highly valued in the world market and sold as premium coffee in Europe.

- The Monsooned Malabar Robusta Coffee, a unique specialty coffee from India, was given GI certification earlier.

14 NEW UREA POLICY-2015

Context:

- The Cabinet Committee on Economic Affairs, chaired by Prime Minister has approved the proposal of the Department of fertilizers to extend the duration of New Urea Policy-2015 from April 1, 2019 till further orders, except for the provisions which stand already amended vide notification dated March 28, 2018.

About:

- It will facilitate to continue operations and regular supply of urea to the farmers.
- The key objectives of the New Urea Policy 2015 are as follows:
 - Maximise indigenous Urea Production to reduce import dependency and reduce subsidy burden on the government
 - Promote energy efficiency to reduce Carbon-footprint (via energy efficiency) to make Urea production environment friendly. [This will be done via revised specific energy consumption norms]
 - Make Urea production plant to adopt best technology available and become globally competitive.
 - Timely supply of Urea to farmers at the same MRP.

Fertilizer:

- ▶ Fertilizer is defined as any organic or inorganic substance, natural or artificial in nature supplying one or more of the chemical elements/nutrients required for plant growth. They provide six macronutrients and eight micronutrients to the plants for well balanced growth.
- ▶ Primary (Macro) nutrients: **Nitrogen (N), Phosphorus (P), and Potassium (K), Calcium (Ca), Magnesium (Mg), Sulphur (S)**
- ▶ Secondary (Micro) Nutrients: **Boron (B), Chlorine (Cl), Copper (Cu), Iron (Fe), Zinc (Zn) etc.**

Types:

- ▶ **Nitrogenous:** Essential Component Is Nitrogen (N). Ex Urea, Ammonium Nitrate, Ammonium Sulphate
- ▶ **Potassic:** Potassium Nitrate, Chile Saltpetre
- ▶ **Phosphatic:** Super Phosphate, Triple Phosphate

Neem Coated Urea:

- ▶ Spraying urea with neem oil has a few benefits (Agronomic and Environmental benefits). Neem has proven nitrification inhibition properties. It slows down the process of nitrogen release from urea (by about 10 to 15 per cent). Thus, it reduces the consumption of the fertilizer, enhances the yield and decreases urea requirement.

15 WTO MINISTERIAL MEETING OF DEVELOPING COUNTRIES

Context:

- A WTO Ministerial meeting of developing countries was hosted by India in New Delhi on 13-14 May 2019.

About:

- Sixteen developing countries, Six Least Developed Countries (LDC) (Argentina, Bangladesh, Barbados, Benin, Brazil, Central African Republic (CAR), Chad, China, Egypt, Guatemala, Guyana, Indonesia, Jamaica, Kazakhstan, Malawi, Malaysia, Nigeria, Oman, Saudi Arabia, South Africa, Turkey, and Uganda) and DG, WTO participated in the meeting.
- The two-day meeting was interactive in order to provide an opportunity to the Ministers to discuss various issues and the way forward.
- On the first day, there was a meeting of senior officers of the participating countries by Union Minister of Commerce & Industry for the heads of delegations. On the 2nd day, the Ministerial Meeting was held.
- The meeting is being held at a time when the multilateral rule-based-trading system is facing serious and grave challenges.
- This meeting at New Delhi was an effort to bring together the developing countries and Least Developed Countries on a platform for sharing common concerns on various issues affecting the WTO and work together to address these issues.
- The two-day meeting also provides an opportunity to the developing countries and LDCs to build consensus on how to move forward on the WTO reforms, while preserving the fundamentals of the multilateral trading system enshrined in the WTO. The deliberations aimed at getting a direction on how to constructively engage on various issues in the WTO, both institutional and negotiating, in the run up to the Twelfth Ministerial Conference of the WTO to be held in Kazakhstan in June 2020.

16

EIGHT CORE INDUSTRIES

Context:

- Ministry of Commerce & Industry released Index of Eight Core Industries (Base: 2011-12=100) March, 2019

About:

- It is compiled and published monthly by the central statistical organisation (CSO), Ministry of Statistics and Programme Implementation six weeks after the reference month ends.
- The eight core industries comprise 40.27 per cent of the weight of items included in the Index of Industrial Production (IIP).
- The combined Index of Eight Core Industries stood at 145.0 in March, 2019, which was 4.7 per cent higher as compared to the index of March, 2018. Its cumulative growth during April to March, 2018-19 was 4.3 percent.
- **Coal:** Coal production increased by 9.1 per cent in March, 2019 over March, 2018.
- **Crude Oil:** Crude Oil production declined by 6.2 per cent in March, 2019 over March, 2018.
- **Natural Gas:** The Natural Gas production increased by 1.4 per cent in March, 2019 over March, 2018.
- **Refinery Products:** Petroleum Refinery production increased by 4.3 percent in March, 2019 over March, 2018.
- **Fertilizers:** Fertilizers production increased by 4.3 percent in March, 2019 over March, 2018. Its cumulative index increased by 0.3 per cent during April to March, 2018-19 over the corresponding period of previous year.
- **Steel:** Steel production increased by 6.7 per cent in March, 2019 over March, 2018.
- **Cement:** Cement production increased by 15.7 per cent in March, 2019 over March, 2018.
- **Electricity:** Electricity generation increased by 1.4 percent in March, 2019 over March, 2018.

Index of Industrial Production (IIP)

- It is an index for India which details out the growth of various sectors in an economy such as mineral mining, electricity and manufacturing.
- The all India IIP is a composite indicator that measures the short-term changes in the volume of production of a basket of industrial products during a given period with respect to that in a chosen base period.
- It is compiled and published monthly by the central statistical organisation (CSO), Ministry of Statistics and Programme Implementation six weeks after the reference month ends.
- The level of the Index of Industrial Production (IIP) is an abstract number, the magnitude of which represents the status of production in the industrial sector for a given period of time as compared to a reference period of time.
- The base year was at one time fixed at 1993–94 so that year was assigned an index level of 100. The current base year is 2011–2012.
- The Eight Core Industries comprise nearly 40.27% of the weight of items included in the Index of Industrial Production (IIP). These are electricity, steel, refinery products, crude oil, coal, cement, natural gas and fertilizers.

17 WORLD CUSTOMS ORGANISATION**Context:**

- Central Board of Indirect Taxes and Customs (CBIC) organized meeting of Regional Heads of Customs Administration of Asia Pacific Region of the World Customs Organisation (WCO) in Kochi.

About:

- India hosted this meeting in its capacity as Vice Chair of the Asia Pacific region that it assumed on 1st July, 2018 for a two-year period.
- The meeting took stock of the progress being made in carrying forward the programmes and initiatives of WCO to promote, facilitate and secure the cross-border trade in the region and the capacity building and technical assistance required to achieve this goal.
- Reflecting the importance of the meeting, Customs delegations from more than twenty countries of the Asia Pacific region participated along with senior officials of the WCO and its regional bodies, i.e. Regional Office for Capacity Building (ROCB) and Regional Intelligence Liaoning Office (RILO).

World Customs Organization (WCO)

- It is an intergovernmental organization headquartered in **Brussels, Belgium**.
- It maintains **the international Harmonized System (HS)** goods nomenclature, and administers the technical aspects of the World Trade Organization (WTO) Agreements on Customs Valuation and Rules of Origin.
- The WCO's primary objective is to enhance the efficiency and effectiveness of member customs administrations, thereby assisting them to contribute successfully to national development goals, particularly revenue collection, national security, trade facilitation, community protection, and collection of trade statistics.

18 PM-KISAN SCHEME EXTENSION

Context:

- The Union Cabinet has approved that the ambit of the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) would be comprehensively extended.

About:

- With this decision, all land holding eligible farmer families (subject to the prevalent exclusion criteria) would avail of the benefits under this scheme.

More Beneficiaries, Greater Progress:

- The revised Scheme is expected to cover around 2 crore more farmers, increasing the coverage of PM-KISAN to around 14.5 crore beneficiaries, with an estimated expenditure by Central Government of Rs. 87,217.50 crores for year 2019-20.

19 DRAFT COPYRIGHT (AMENDMENT) RULES, 2019

Context:

- Recently, Draft Copyright (Amendment Rules), 2019 was released by the Department for Promotion of Industry and Internal Trade (DPIIT).

About:

- The amendments are being brought in to bring the Copyright Act on par with other relevant legislations and to ensure it is in sync with the technological advancements in the current digital era.
- The copyright regime is governed by the Copyright Act, 1957 and the Copyright Rules, 2013.
- The Copyright Rules, 2013 were last amended in 2016 through the Copyright Amendment Rules, 2016.

Proposals in Draft Rules:

- Setting up an Appellate Board to replace the Copyright Board.
- The Chairman and other members of the Board will be appointed as per the provisions of the Trade Marks Act, 1999.
- It also proposes to amend the manner in which copyright societies fix their tariff schemes.
- A copyright Society is a legal body which protects or safeguards the interest of owners of the work by giving assurance to the creative authors of the commercial management of their works.
- These societies issue licences and collects royalties in accordance with a tariff scheme.
- DPIIT has proposed in the amendments that when fixing its tariff the copyright society may consider, "cross-sectional tariff comparisons, economic research, the nature and scope of the use of the work, the commercial value of the rights in use and the benefits to licensees".
- The amendments propose to make it mandatory for copyright societies to publish "the annual transparency" report for each financial year on its Website.

20

FINANCIAL STABILITY AND DEVELOPMENT COUNCIL (FSDC)

Context:

- The 20th Meeting of the **Financial Stability and Development Council (FSDC)** was held under the Chairmanship of the Union Minister of Finance and Corporate Affairs.

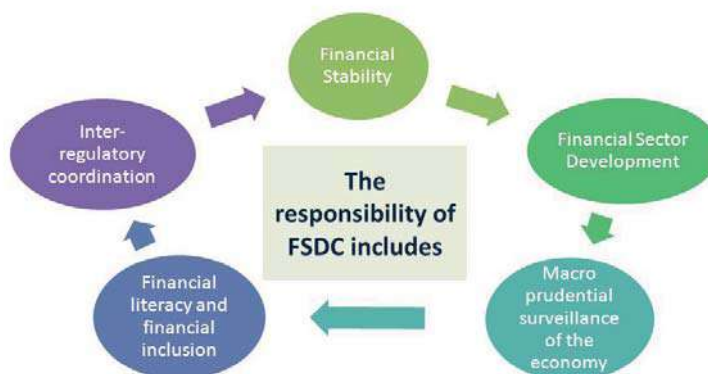
About:

- The Meeting reviewed the current global and domestic economic situation and financial stability issues including, inter-alia, those concerning Banking and NBFCs.
- The Council was also apprised of the progress made towards setting-up of the Financial Data Management Centre (FDMC) to facilitate integrated data aggregation and analysis and also a Computer Emergency Response Team (CERT-Fin) towards strengthening the cyber security framework for the financial sector.
- The Council also held consultations to obtain inputs/ suggestions of the financial sector regulators for the Budget. All the regulators presented their proposals for the Union Budget 2019-20.

Financial Stability and Development Council (FSDC):

Financial Stability and Development Council

The FSDC, set up in 2010, is a body consisting all regulators and the Ministry of Finance. It is the highest forum in matters relating to financial stability. The Council is chaired by the Union Finance Minister



- It is an apex-level body constituted by the government of India. Recommendations for such a super regulatory body were first mooted by the Raghuram Rajan Committee in 2008. Finally in 2010, the then Finance Minister of India, Pranab Mukherjee, decided to set up such an autonomous body dealing with macro prudential and financial regularities in the entire financial sector of India.
- FSDC has replaced the **High Level Coordination Committee on Financial Markets (HLCCFM)**, which was facilitating regulatory coordination, though informally, prior to the setting up of FSDC.
- It is not a statutory body.
- Chairperson:** The Union Finance Minister of India
- Members:** Heads of the financial sector regulatory authorities (i.e., RBI, SEBI, IRDA, and PFRDA), Finance Secretary and/or Secretary, Department of Economic Affairs (Union Finance Ministry), Secretary, Department of Financial Services, and Chief Economic Adviser.

21

EAC-PM RELEASES A DETAILED ANALYSIS ON ROBUSTNESS OF INDIA'S GDP ESTIMATION METHODOLOGY

Context:

- The Economic Advisory Council to the Prime Minister released a detailed note titled 'GDP estimation in India- Perspectives and Facts'. The note provides a clear rationale for India's switch to an improved GDP estimation methodology in January 2015.

About:

- The new methodology that uses 2011-12 as the base year includes two major improvements:-
 - Incorporation of MCA21 database, and
 - Incorporation of the Recommendations of System of National Accounts (SNA), 2008.

Highlights of the Report:

- The note provides detailed evidence that indicates that Dr. Subramanian has cherry-picked a few indicators and performed a rather unconvincing regression analysis to prove his hypothesis that India's GDP was over-estimated post 2011-12.
- The note concludes with the point that India's GDP estimation methodology is by no means a perfect exercise and the Ministry of Statistics and Program Implementation is working on multiple aspects to improve the accuracy of economic data.

GDP:

- Gross domestic product (GDP)** is a monetary measure of the market value of all the final goods and services produced in a specific time period, often annually. GDP (nominal) per capita does not, however, reflect differences in the cost of living and the inflation rates of the countries; therefore using a basis of GDP per capita at purchasing power parity (PPP) is arguably more useful when comparing differences in living standards between nations.

The Data Collection Process:

- The Central Statistics Office (CSO), under the Ministry of Statistics and Program Implementation, is responsible for macroeconomic data gathering and statistical record keeping.
- Its processes involve conducting an annual survey of industries and compilation of various indexes like the Index of Industrial Production (IIP), Consumer Price Index (CPI), etc.
- The CSO coordinates with various federal and state government agencies and departments to collect and compile the data required to calculate the GDP and other statistics.

22

NATIONAL COMMON MOBILITY CARD

Context:

- NCMC has been launched in India with the tagline of 'One Nation One Card'

About NCMC Card:

- It has 2 instruments on it – a regular debit card which can be used at an ATM, and a local wallet (stored value account), which can be used for contactless payments, without the need to go back to the server or additional authentication.

- It is envisioned that a single card will be usable for all local travel needs across the country.
- This is aimed at low value payments for various segments e.g. Transit, Smart cities, Toll, Parking and other low value merchant payments, in addition to the normal day to day retail payments.
- The vision behind the introduction of this card is to have interoperability, based on open standards.
- The wallet where money is stored is referred as Global/Card wallet.
- Also, any refund pertaining to the transactions done using global/card wallet will be credited in the replica of the wallet maintained at bank's end, which further can be added to Global/Card Wallet by the customer.

23

NPA ACCOUNTS

- In terms of Reserve Bank of India (RBI)'s master circular on **Prudential norms on Income Recognition, Asset Classification and Provisioning pertaining to Advances**, an asset becomes non-performing when it ceases to generate income for the bank.

About:**■ When an asset is treated as NPA?**

- In respect of a term loan, interest and/or instalments of the principal remain overdue for a period of more than 90 days;
- In respect of an Overdraft/Cash Credit, the account remains 'out of order';
- In respect of bills purchased and discounted, the bill remains overdue for a period of more than 90 days;
- In respect of agricultural loans, the instalment of principal or interest thereon remains overdue for—
 - Two crop seasons for short-duration crops, and
 - For one crop season for long-duration crops.
- The amount of liquidity facility remains outstanding for more than 90 days, in respect of a securitisation transaction;
- In respect of derivative transactions, the overdue receivables representing positive mark-to-market value of a derivative contract, if these remain unpaid for a period of 90 days from the specified due date for payment.

Steps taken to expedite and enable resolution of NPAs:

- **Insolvency and Bankruptcy Code, 2016** (IBC) has been enacted, which has provided for taking over the management of the affairs of the corporate debtor at the outset of the corporate insolvency resolution process.
- **Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act** has been amended to make it more effective, with provision for three months' imprisonment in case the borrower does not provide asset details
- **Suits for recovery of dues** are also filed by banks before Debts Recovery Tribunals. Six new Debts Recovery Tribunals have been established to expedite recovery.
- Under the **PSB Reforms Agenda**, PSBs have created **Stressed Asset Management Verticals** to focus attention on recovery, segregated monitoring from sanctioning roles in high-value loans.

24 m-KISAN PORTAL

Context:

- Information and services available on m-kisan portal are crop specific advisories to farmers through SMS and Voice;

About mKisan:

- mKisan SMS Portal for farmers enables all Central and State government organizations in agriculture and allied sectors to give information/services/advisories to farmers by SMS in their language, preference of agricultural practices and location.
- As part of agricultural extension (extending research from lab to the field), under the National e-Governance Plan – Agriculture (NeGP-A), various modes of delivery of services have been envisaged.
- This portal provides value added services such as IVRS (Interactive Voice Response System), USSD (Unstructured Supplementary Service Data) and Pull SMS which are value added services to receive broadcast messages and attain web based services without access to internet.
- The prime objective is to make SMS and other mobile based services a tool of 2 way agricultural extension wherein not only are farmers given information, but they can also raise queries through Pull SMS or USSD.

25 ELECTRICITY GENERATION THROUGH ATOMIC ENERGY

Context:

- Government has taken several steps to increase the nuclear power capacity and to provide adequate quantity of fuel and to increase the share of nuclear power generation.

About:

- The share of atomic energy in the overall electricity generation in the country was about 2.93% in the year 2017-18.
- Nuclear share has remained around 3% of the total electricity generation in the country. The main reason for low share has been the low installed capacity base. The reasons for low capacity base are:
 - Technology development and international embargo regime that persisted from 1974 to 2008. As a result, all the technologies for nuclear power including the fuel cycle technologies had to be developed within the country, thus took time.
 - Another constraint faced during the first two decades was availability of financial resources, as it had to solely depend on budgetary support. However, the earlier constraints have now been overcome and nuclear power programme is poised for rapid expansion.
- To increase the share of nuclear power generation, the Government has taken several steps to increase the nuclear power capacity and to provide adequate quantity of fuel. These include:**
 - Resolution of issues related to Civil Liability for Nuclear Damage (CLND) Act & Creation of Indian Nuclear Insurance Pool (INIP).
 - Accord of administrative approval and financial sanction of - ten (10) indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) to be set up in fleet mode & two (02) units of Light Water Reactors (LWRs) to be set up in cooperation with Russian Federation.
 - Amendment of the Atomic Energy Act to enable Joint Ventures of Public Sector Companies to set up nuclear power projects.

- Entering into enabling agreements with foreign countries for nuclear power cooperation including supply of fuel.

26 DIGITAL LEARNING

Context:

- Various initiatives have been taken to promote digital learning under 'National Mission on Education through Information and Communication Technology' (NMEICT).

About:

- Department of Higher Education, Ministry of Human Resource Development is administering a programme '**National Mission on Education through Information and Communication Technology**' (NMEICT) to leverage the potential of ICT to make the best quality content accessible to all learners in the country, free of cost.

Programs under the initiative NMEICT

■ SWAYAM

- The 'Study Webs of Active Learning for Young Aspiring Minds' (SWAYAM) is an integrated platform for offering online courses and covering school (9th to 12th) to Post Graduate Level.
- The online courses are being used not only by the students but also by the teachers and non-student learners, in the form of lifelong learning.

■ SWAYAM Prabha

- SWAYAM Prabha is an initiative to provide 32 High Quality Educational Channels through DTH (Direct to Home) across the length and breadth of the country on 24X7 basis.
- It has curriculum-based course content covering diverse disciplines. This is primarily aimed at making quality learning resources accessible to remote areas where internet availability is still a challenge.

■ National Digital Library (NDL)

- NDL is a project to develop a framework of virtual repository of learning resources with a single-window search facility. There are more than 3 crore digital resources available through the NDL
- The contents cover almost all major domains of education and all major levels of learners including life-long learners.

■ Spoken Tutorial

- They are 10-minute long, audio-video tutorial, on open source software, to improve employment potential of students. It is created for self learning, audio dubbed into all 22 languages and with the availability of online version.
- The Spoken Tutorial courses are effectively designed to train a novice user, without the support of a physical teacher.

■ Free and Open Source Software for Education (FOSSEE)

- FOSSEE is a project promoting the use of open source software in educational institutions

- It does through instructional material, such as spoken tutorials, documentation, such as textbook companions, awareness programmes, such as conferences, training workshops, and Internships.
- Textbook Companion (TBC) is a collection of code for solved examples of standard textbooks.

■ Virtual Lab

- The Virtual Labs Project is to develop a fully interactive simulation environment to perform experiments, collect data, and answer questions to assess the understanding of the knowledge acquired.
- In order to achieve the objectives of such an ambitious project, it is essential to develop virtual laboratories with state-of-the-art computer simulation technology to create real world environments and problem handling capabilities.

■ E-Yantra

- e-Yantra is a project for enabling effective education across engineering colleges in India on embedded systems and Robotics.
- The training for teachers and students is imparted through workshops where participants are taught basics of embedded systems and programming.

27

CHALLENGES FACED BY THE DAIRY INDUSTRY

Context:

- **Department of Animal Husbandry And Dairying** has received representations from stakeholders like **Indian Dairy Association** and **Gujarat Cooperative Milk Marketing Federation Limited**, to reduce GST on some dairy products like ghee, butter oil and flavoured milk and to reduce import duty on some dairy machinery.

More on news:

- As per Goods and Services Tax (GST) Act 2017, the current rate of GST applicable on dairy products ranges from 5% to 18%.
- Indian cattle and buffaloes have among the lowest productivity in the world. Similarly there is a shortage of organized dairy farms and there is a need of high degree of investment to take dairy industry to global standards.

Steps taken by Department of Animal Husbandry And Dairying

- To improve low productivity of indigenous bovine breeds, Department has been implementing **Rashtriya Gokul Mission** with aim of development and conservation of indigenous bovine breeds and enhancing production and productivity thereby making milk production more remunerative to the farmers.
- In order to promote organized dairy farming and investment, Department has been supplementing the efforts of State Governments by implementing following dairy development schemes for creation/strengthening of infrastructure for production of quality milk, procurement, processing and marketing of milk and milk products across the country:
 - National Programme for Dairy Development (NPDD)
 - Dairy Entrepreneurship Development Scheme (DEDS)
 - National Dairy Plan-I (NDP-I)
 - Dairy Processing and Infrastructure Development Fund (DIDF)
 - Supporting Dairy Cooperatives and Farmer Producer Organizations engaged in dairy activities (SDCFPO)

28

NATIONAL ELECTRIC MOBILITY MISSION PLAN (NEMMP) 2020

Context:

- **Ministry of Heavy Industries & Public Enterprises** has implemented **National Electric Mobility Mission Plan**

About:

■ NEMMP 2020

- It is a **National Mission document** providing the vision and the roadmap for the faster adoption of electric vehicles and their manufacturing in the country.
- This plan has been designed to enhance national fuel security, to provide affordable and environmentally friendly transportation and to enable the Indian automotive industry to achieve global manufacturing leadership.
- As part of the NEMMP 2020, Department of Heavy Industry formulated a Scheme viz. **Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME India) Scheme** in 2015 to promote manufacturing of electric and hybrid vehicle technology and to ensure sustainable growth of the same.

29

INTEGRATED MANAGEMENT OF PUBLIC DISTRIBUTION SYSTEM

Context:

- **Department of Consumer Affairs** under the **Ministry of Consumer Affairs, Food & Public Distribution** has launched a new Central Sector scheme namely **"Integrated Management of Public Distribution System (IM-PDS)"**.
- It is operational in Andhra Pradesh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Maharashtra, Rajasthan, Telangana and Tripura, wherein a beneficiary can avail his share of food-grain from any district in the state.

Objectives of the scheme:

- To integrate the existing PDS systems/portals of States/UTs with the Central Systems/portals
- Implementation of nation-wide portability of ration cards to lift foodgrains from any fair price shop (FPS) across the country, moving towards 'one nation one ration card'.
- **One Nation, One Ration Card** will mostly assist seasonal and circular migrant workers to have better access to PDS, both, at source and destination.
- It is based on two important guiding principles: Aadhar and digitalisation of ration cards.
- National level de-duplication of ration cards/beneficiary. It will bring more transparency and efficiency in distribution of food grains as it will improve the mechanism to identify duplicate ration cards.

Challenges of the scheme:

- The authorities can be expected to encounter hard-hitting ground realities for designing and implementing the scheme.
- The first hurdles will be to have exact data on the mobility of poor households migrating to work, locating intra- and inter-state destinations and sectors employing the workers.

- Secondly, the domicile-based legislation for accessing government schemes and social security needs serious rethinking before making 'One Nation, One Ration Card' portable.
- Portability of Integrated Child Development Services, Mid-Day Meals, immunisation, health care and other facilities for poor migrant households can't be neglected and should be made portable.
- It is feared that both Aadhar and digital ration card may exclude either a person who migrates alone, or migrates with his family or the left-behind vulnerable family member who stays back in the village.
- The Rastriya Sawthya Bima Yojna (RSBY), the national health insurance scheme of the Indian government, had an interesting component of splitting the unique insurance card to help both migrants and those left behind.
- This component from RSBY may be adopted in devising PDS access to both migrants and those left behind. Moreover, Aadhar seeding and the biometric authentication of eligible migrant workers at the destination may create obstacles for hassle-free access to PDS both, at source and destination.
- Finally, there are multiple social security, welfare, food and anti-poverty schemes in India, in addition to an array of labour laws.
- Therefore, the 'One Nation, One Ration Card' should create inclusion in food schemes, both, at source and destination, without negating the very spirit of ensuring household food security of the migrant family.

30

PRICE RISE OF ESSENTIAL COMMODITIES

Context:

- Government has taken various measures from time to time to stabilize prices of essential food

Factors affecting the prices of food:

- Mismatch in demand and supply,
- Shortfall in production owing to adverse weather conditions and seasonality,
- Increased transportation costs,
- Supply chain constraints like lack of storage facilities,
- Artificial shortage created by hoarding and black marketing, etc.

Steps taken by Government:

- Appropriately utilizing trade and fiscal policy instruments like import duty and export management through instruments like Minimum Export Price, export restrictions, etc, to regulate domestic availability and moderate prices
- Imposition of stock limits and advising States for effective action against hoarders & black marketers
- Promulgation of appropriate Minimum Support Prices to incentivize farmers for increasing production.
- Government is also implementing Schemes like Mission for Integrated Development of Horticulture (MIDH), National Food Security Mission (NFSM), etc. for increasing agricultural production and productivity through appropriate interventions.
- Besides, Government is also implementing Price Stabilization Fund (PSF) and Ministry of Food Processing Industries (MoFPI) is implementing scheme "Operation Greens"

Price Stabilization Fund (PSF):

- It was set up in 2014-15 under the **Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW)** to help regulate the price volatility of important agri-horticultural commodities like onion, potatoes and pulses were also added subsequently.

- It was transferred from DAC&FW to the Department of Consumer Affairs (DOCA)
- It provides for maintaining a strategic buffer of aforementioned commodities for subsequent calibrated release to moderate price volatility and discourages hoarding and unscrupulous speculation.
- It is utilized for granting interest free advance of working capital to Central Agencies, State/UT Governments/Agencies to undertake market intervention operations.
- Apart from domestic procurement from farmers/wholesale mandis, import may also be undertaken with support from the Fund.

Objectives of Operation Greens:

- Enhancing value realisation of TOP farmers by targeted interventions to strengthen TOP production clusters and their FPOs, and linking/connecting them with the market.
- Price stabilisation for producers and consumers by proper production planning in the TOP clusters and introduction of dual use varieties.
- Reduction in post-harvest losses by creation of farm gate infrastructure, development of suitable agro-logistics, creation of appropriate storage capacity linking consumption centres.
- Increase in food processing capacities and value addition in TOP value chain with firm linkages with production clusters.
- Setting up of a market intelligence network to collect and collate real time data on demand and supply and price of TOP crops.

31 PROMOTION OF AGRO EXPORTS

Context:

- To promote agricultural exports, the Government has introduced a comprehensive Agriculture Export Policy

Objectives:

- To diversify our export basket, destinations and boost high value- and value-added agricultural exports, including focus on perishables.
- To promote novel, indigenous, organic, ethnic, traditional and non-traditional Agri products exports.
- To provide an institutional mechanism for pursuing market access, tackling barriers and dealing with sanitary and phytosanitary issues.
- To strive to double India's share in world agri exports by integrating with global value chains.
- Enable farmers to get benefit of export opportunities in overseas market.

32 BANNING OF UNREGULATED DEPOSIT SCHEMES BILL

Context:

- The Union Cabinet has approved the banning of Unregulated Deposit Schemes Bill, 2019.

Expected Outcome:

- The Bill will help tackle the menace of illicit deposit taking activities in the country, which at present are exploiting regulatory gaps and lack of strict administrative measures to dupe poor and gullible people of their hard-earned savings.

33 FOUR NEW PRODUCTS GET GI TAG

Context:

- **Department for Promotion of Industry and Internal Trade** has added four new products to the list of registered GIs.

About:

- Four new products added to GI list are:
 - **PalaniPanchamirtham from Palani Town in Dindigul District of Tamil Nadu State,**
 - **Tawlhlohpuan and MizoPuancheifrom the state of Mizoram**
 - **Tirur Betel leaf from Kerala**
- **Palani Panchamirtham from Palani Town:** It is a combination of banana, jaggery sugar, cow ghee, honey and cardamom in a definite proportion. It is prepared in a natural method without addition of any preservatives or artificial ingredients and is well known for its religious fervour and gaiety. **This is the first time a temple 'prasadam' from Tamil Nadu has been bestowed with the GI tag.**
- **Tawlhlohpuania a good quality fabric** from Mizoram known for warp yarns, warping, weaving & intricate designs that are made by hand. Tawlhloh, in Mizo language, means 'to stand firm or not to move backward'.
- **MizoPuanchei is a colourfulMizo shawl/textile, from Mizoram.** It is considered as the **most colourful among the Mizo textiles.** It is an essential possession for every Mizo lady and an important marriage outfit in the state. It is also the most commonly used costume in Mizo festive dances and official ceremonies.
- Tirur betel vine from Kerala is valued both for its mild stimulant action and medicinal properties. It is generally used for **making pan-masala.**

34 GOVERNMENT REMOVES DEBENTURE REDEMPTION RESERVE (DRR) REQUIREMENT FOR LISTED COMPANIES, NBFCs AND HFCs

Context:

- The Ministry of Corporate Affairs has amended the Companies (Share Capital & Debentures) Rules by removing **Debenture Redemption Reserve requirement** for Listed Companies, NBFCs and HFCs.

About:

- The Ministry of Corporate Affairs relaxed the DRR requirement. It said that listed companies, NBFCs registered with the Reserve Bank of India and HFCs registered with the National Housing Bank would no longer be required to maintain a DRR if they issue non-convertible debentures (NCDs). The DRR requirement for unlisted companies (excluding unlisted NBFCs and HFCs) is still on, but at a lower rate of 10 per cent (against the earlier 25 per cent).

Objectives:

- removing the requirement for creation of a DRR of 25% of the value of outstanding debentures in respect of listed companies, NBFCs registered with RBI and for Housing Finance Companies registered with National Housing Bank (NHB) both for public issue as well as private placements;
- Reduction in DRR for unlisted companies from the present level of 25% to 10% of the outstanding debentures.

- NBFCs and HFCs have been the most frequent issuers of NCDs in the market. With the DRR rule gone, the government expects more of these firms to come up with NCD issues that could ease their funding constraints. The extra money that the companies will now be left with due to no provisioning for the DRR is expected to flow into the economy by way of credit too.

Benefits:

- **Ease of doing business:** It is in accordance with the Government policy to improve the ease of doing business. The reduction in DRR will leave enough room for companies to extend the spending.
- **Boost Bond Market:** The measure has been taken by the Government with a view to **reducing the cost of the capital raised** by companies through issue of debentures and is expected to significantly **deepen the Bond Market**.
- **Safeguarding the interest of Investors:** The rules, while retaining DRR requirement for Unlisted Companies, provide for reduction from a DRR of 25% to a DRR of 10% for such companies, so as to **safeguard interests of investors**.

Challenges:

- With no backing of DRR for the debenture issues from companies (except unlisted ones)/NBFCs or HFCs, your investment in NCDs are set to become riskier. However, the rule requiring NCD issuers to deposit 15 per cent of their maturing amounts for the next fiscal has not been changed and remains a protection for buyers.

Way-out:

- The RBI and the Centre plan to monitor closely the liquidity positions of NBFCs/HFCs so that they have early warning of possible defaults. However, the lack of a DRR does make NCDs, particularly unsecured ones, more risky. Therefore, the move may have a negative impact on debt investors in the medium- to long-term.

Context:

- The Union Minister for Communications, Electronics & IT and Law & Justice Shri Ravi Shankar Prasad has announced the rollout of Aadhaar Enabled Payment System (AePS) Services by India Post Payments Bank (IPPB).

About:

- With the launch of AEPS services, India Post Payments Bank (IPPB) has now become the single largest platform in the country for providing interoperable banking services to the customers of ANY BANK by leveraging the last mile unprecedented reach of the Postal network.
- IPPB's unparalleled network complimented with robust interoperable technology platform set up by National Payments Corporation of India (NPCI) is poised to take banking to each & every household across the remotest parts of the country.
- With AePS services any common person with a bank account linked to Aadhaar can perform basic banking services such as cash withdrawals and balance enquiry irrespective of the bank they hold their account with.
- To avail these services, a customer with an Aadhaar linked account can simply authenticate his/her identity with fingerprint scan & Aadhaar authentication to complete a transaction. AePS services are bank-agnostic and are driven by an inexpensive infrastructure enabling low cost delivery of doorstep banking services to every section of the society without discrimination, thus bringing forth the dawn of a 'Truly Inclusive Financial System'.

About India Post Payments Bank:

- India Post Payments Bank (IPPB) has been established under the Department of Posts, Ministry of Communication with 100% equity owned by Government of India.
- The bank has been set up with the vision to build the most accessible, affordable and trusted bank for the common man in India.
- The fundamental mandate of India Post Payments Bank is to remove barriers for the unbanked & under banked and reach the last mile leveraging the Postal network.
- IPPB's reach and its operating model is built on the key pillars of India Stack - enabling Paperless, Cashless and Presence-less banking in a simple and secure manner at the customers' doorstep, through a CBS-integrated smartphone and biometric device.
- Leveraging frugal innovation and with a high focus on ease of banking for the masses, IPPB delivers simple and affordable banking solutions through intuitive interfaces available in 13 languages.
- IPPB is committed to provide a fillip to a less cash economy and contribute to the vision of Digital India. India will prosper when every citizen will have equal opportunity to become financially secure and empowered.

36

INDIA'S SECOND MULTI MODAL TERMINAL

Context:

- The Prime Minister Shri Narendra Modi dedicated to the nation India's second riverine Multi Modal terminal built at Sahibganj in Jharkhand on 12 September, 2019.

Ministry/Agency: Ministry of Shipping

About:

- This is the second of the three Multi Modal Terminals (MMTs) being constructed on river Ganga under Jal Marg Vikas Project (JMVP). Earlier, in November, 2018 the Prime Minister had inaugurated the MMT at Varanasi.
- The Multi-Modal terminal at Sahibganj will open up industries of Jharkhand and Bihar to the global market and provide Indo-Nepal cargo connectivity through waterways route.
- It will play an important role in transportation of domestic coal from the local mines in Rajmahal area to various thermal power plants located along NW-1.
- Other than coal, stone chips, fertilisers, cement and sugar are other commodities expected to be transported through the terminal.
- The multi-modal terminal will also help to create direct employment of about 600 people and indirect employment of about 3000 people in the region.
- The convergence of Road-Rail-River Transport at Sahibganj through the new multi-modal terminal will connect this part of the hinterland to Kolkata, Haldia and further to the Bay of Bengal. Also, Sahibganj will get connected to North-East States through Bangladesh by river-sea route.

37

EXPORT CREDIT GUARANTEE CORPORATION (ECGC)

Context:

- Ministry of Commerce & Industry through Export Credit Guarantee Corporation (ECGC) has introduced a new Export Credit Insurance Scheme (ECIS) called NIRVIK to enhance loan availability and ease the lending process.

About:

- The scheme was announced by the Finance Minister Nirmala Sitharaman to boost exports on 14th September 2019 in New Delhi.
- Under the scheme the gems, jewellery and diamond (GJD) sector borrowers with limit of more than Rs. 80 crore will have a higher premium rate as compared to non-GJD sector borrowers of this category due to the higher loss ratio.
- The ECGC cover provides additional comfort to banks as the credit rating of the borrower is enhanced to AA rated account.
- Enhanced cover will ensure that Foreign and Rupee export credit interest rates will be below 4% and 8% respectively for exporters.
- Under ECIS, insurance cover percentage has also been enhanced to 90% from the present average of 60% for both Principal and Interest.

38**MEASURES TO ENHANCE IPR ECOSYSTEM THROUGH LOWER FEES****Context:**

- India is taking measures in strengthening its intellectual property ecosystem.

About:

- Recognizing the importance of nurturing innovation and creativity in a knowledge economy, India is taking great strides in strengthening its intellectual property ecosystem.
- National IPR Policy adopted by the Government in 2016 has paved the way to further strengthen the IPR regime in the country
- Domestic filing for patents has increased from 22% in 2013-14 to 34% in 2018-19. Awareness programmes for IP are being conducted at schools, colleges, universities, R&D institutes and industry clusters.
- Multi-pronged strategies have been used to address the issue of pendency in IP applications, including manifold augmentation of manpower and streamlining of procedures. These strategies have paid rich dividends, and there has been a sharp jump in the disposal of IP applications:

39**DIGITAL PLATFORM FOR ISSUANCE OF ELECTRONIC CERTIFICATES OF ORIGIN****Context:**

- Commerce and Industry Ministry Launches Common Digital Platform for Issuance of Electronic Certificates of Origin.

About:

- This platform will be a single access point for all exporters, for all FTAs/PTAs and for all agencies concerned.
- Certificate of Origin will be issued electronically which can be in paperless format if agreed to by the partner countries.
- Authorities of partner countries will be able to verify the authenticity of certificates from the website. Further, it provides administrative access to Department of Commerce for reporting and monitoring purposes. The benefits of this platform will be:

New Platform	Existing Process
The issuance process is electronic, paperless and transparent	Current process requires the exporter to visit the agency thrice for each certificate
Real-time tracking of FTA utilization at product level, country level etc.	Real-time tracking is not possible as data is fragmented across various agencies
Electronic Certificate of Origin issued	Physical Certificates of Origin issued
Possible to electronically exchange CoO with the partner countries	Electronic exchange of CoOs not possible
Reduces transaction cost and time for the exporters	Current processes take more time and cost

- Exporters may register on this platform and apply for CoOs to any of the designated agencies.
- The platform will be made live for FTAs in a phased manner as per the concurrence of the concerned partner countries.
- Further, once the partner countries agree to an electronic data exchange, the CoOs will be electronically sent to the Customs of the partner countries. After this, there will not be any need for physical CoO copy, saving transaction cost and time for the Indian exporters.
- India has 15 Free Trade Agreements (FTAs)/ Preferential Trade Agreements (PTAs) with various partner countries under which Indian exporters avail reduced import tariffs in the destination country. In order to avail this benefit, the exporters must provide a preferential CoO. These certificates are issued by designated agencies in India after vetting of the rules of origin criteria as per the respective FTA/PTA.
- At present preferential Certificate of Origin is issued from the various notified agencies around the country through manual processes. A new common digital platform for issuance of electronic preferential CoOs has been conceptualized to address various challenges in the current process. The platform has been designed and developed by DGFT and Regional & Multilateral Trade Relations (RMTR) Division, Department of Commerce, Ministry of Commerce and Industry, Government of India.

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BAMBOO TECHNOLOGY PARKS TO BE SET UP IN THE TWO NEW UTS OF JAMMU AND KASHMIR, AND LADAKH

Context:

- Dr. Jitendra Singh, Union Minister of State (Independent Charge), Ministry of Development of North Eastern Region took a review meeting with officials of the Ministry and the North Eastern Council (NEC), during which he announced that Bamboo Technology Parks would be set up in the two new Union Territories of Jammu & Kashmir and Ladakh.

About:

- The Cane and Bamboo Technology Centre (CBTC) under NEC will implement the project
- It has now been decided that the model for bamboo cultivation, harvesting and utilisation currently existing in the North Eastern Region shall be replicated in the two new Union Territories to give a fillip to the sector.

- The project for setting up three new Bamboo Technology Parks in Jammu, Srinagar and Leh would be in consonance with the National Bamboo Mission (NBM).
- A Bamboo Industrial Park has already been approved to be set up in the Dima Hasao district of Assam.

41

FINANCE MINISTRY LAUNCHES TWO NEW IT INITIATIVES - ICEDASH & ATITHI FOR IMPROVED MONITORING AND PACE OF CUSTOMS CLEARANCE OF IMPORTED GOODS AND FACILITATING ARRIVING INTERNATIONAL PASSENGERS

- ICEDASH is an Ease of Doing Business (EoDB) monitoring dashboard of the Indian Customs helping public sees 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.
- With ATITHI, 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.

42

INDUSTRIAL RELATIONS CODE BILL, 2019

Context:

- The Union Cabinet chaired has given its approval for introduction of the Industrial Relations Code, 2019 in the Parliament.

Benefits:

- Setting up of two-member tribunal (in place of one member) introducing a concept that some of the important cases will be adjudicated jointly and the rest by a single member resulting speedier disposal of cases.
- To impart flexibility to the exit provisions (relating to retrenchment etc.), for which, the threshold for prior approval of appropriate Government has been kept unchanged at 100 employees, but added a provision for changing 'such number of employees' through notification.
- The re-skilling fund, is to be utilised for crediting to workers in the manner to be prescribed.
- Definition of Fixed Term Employment and that it would not lead to any notice period and payment of compensation on retrenchment excluded.
- Vesting of powers with the government officers for adjudication of disputes involving penalty as fines thereby lessening the burden on tribunal.

43

TAXATION LAWS (AMENDMENT) BILL, 2019

- The Union Cabinet chaired by the Prime Minister has approved the proposal for introducing the **Taxation Laws (Amendment) Bill, 2019 in order to replace the Ordinance.**
- In order to promote growth and investment, a new provision was **inserted in the IT Act to provide that with effect from the current financial year 2019-20.**
- An existing domestic company may opt to pay tax at **22% plus surcharge at 10% and cess at 4%, if it does not claim any incentive/deduction.** The effective tax rate for these companies comes to 25.17% for these companies. They would **also not be subjected to Minimum Alternate Tax (MAT).**
- In order to attract fresh investment in manufacturing and provide boost to 'Make-in India' initiative, if a domestic manufacturing company set up on or after 1st October, 2019 and which commences manufacturing by 31st March, 2023, may opt **to pay tax at 15% plus surcharge at 10% and cess at 4% if it does not claim any incentive/deduction.** The effective rate of tax comes to 17.16% for these companies. **They would also not be subjected to MAT.**
- In order to provide relief to listed companies, the buy-back tax on shares of listed companies introduced through the Finance Act will not apply to buy-backs in respect of which public announcement were made before 5th July, 2019.

44

COMMERCE & INDUSTRY MINISTER TO INAUGURATE NATIONAL PUBLIC PROCUREMENT CONCLAVE

- The 3rd edition of National Public Procurement Conclave (NPPC) was organised by Government e-Marketplace (GeM) in association with Confederation of Indian Industry (CII) on 5-6 December 2019 in New Delhi. The conclave was inaugurated by Union Minister of Commerce & Industry and Railways, Piyush Goyal.
- It will provide an opportunity for industry, academia and Government organizations to interact and also serve as a platform for sellers on GeM to showcase their products and services.
- The key features of the conclave are panel discussions on role of MSMEs, Startups and women in public procurement. A special session on services on GeM - hospitality, travel and accommodation bookings is also scheduled during the two-day event. A Live GeM "clinic" to resolve queries on the spot and facilitate Registration of Buyer and Sellers on GeM will be set up at the Conclave. Award and recognition to the top buyers and sellers on GeM will be announced during the Conclave.
- Exhibitions of various products and services that are available on the GeM platform will be showcased during the Conclave on 5th-6th December.
- GeM is a complete online marketplace that allows all sellers to register themselves and transact on the platform. All verifications are done through online integration. GeM promotes inclusiveness and ease of doing business with the Government. It is a transparent online marketplace that not only speeds up public procurement but also ensures substantial savings for the Government.

45

COMPANY LAW COMMITTEE RECOMMENDS DECRIMINALIZATION OF COMPOUNDABLE OFFENCES UNDER COMPANIES ACT

- The Company Law Committee, constituted by the Ministry of Corporate Affairs (MCA), has submitted the first phase report to the Union Finance & Corporate Affairs Minister Smt. Nirmala Sitharaman, proposing

amendments in the Companies Act, 2013 for further decriminalising the offences under the said Act and to facilitate ease of doing business and ease of living.

- The Company Law Committee was constituted for examining and making recommendations to the Government on various provisions and issues pertaining to implementation of the Companies Act, 2013 and the Limited Liability Partnership Act, 2008 and other related matters.
- The MCA has undertaken several reforms towards easing the business environment in the country by providing Ease of Doing Business to law abiding corporates, fostering improved corporate compliance for stakeholders at large and also to address emerging issues having impact on the working of corporates in the country.
- The main recommendations of the Committee with regard to decriminalization of compoundable offences are as under:-
 - Re-categorising 23 offences out of the 66 remaining compoundable offences under the Act, to be dealt with in the in-house adjudication framework wherein these defaults would be subject to a penalty levied by an adjudicating officer.
 - Omitting, altogether, 7 compoundable offences; limiting punishment for 11 compoundable offences to only fine by removing provision for imprisonment and recommending that 5 offences be dealt under alternative frameworks;
 - Reducing the quantum of penalties in respect of certain provisions, which were shifted to the in-house adjudication framework through the recently passed Companies (Amendment) Act, 2019;
 - Retention of status-quo in case of the non-compoundable offences

Debenture: Debenture is a medium to long-term debt instrument used by large companies to borrow money at a fixed rate of interest. Debenture are of two types:

- **Fully Convertible debentures** are those in which **whole value** of debentures into equity shares of the company.
- **In Partly Convertible debentures, only some part** of debentures will be eligible for conversion into equity shares of the company.

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CABINET APPROVES LAUNCH OF BHARAT BOND EXCHANGE TRADED FUND

- Soon, Bond ETFs will be another investment vehicle available to retail investors providing access to bonds of state-run enterprises.
- Bond ETFs are similar to how equity ETFs invest in line with indices covering specific baskets like the Nifty50, Nifty Next 50 and Nifty Quality 30, among others
- While bond ETFs are not new in India, they have not been very popular. At present, only three GSec ETFs are available, all with miniscule assets and poor trading volumes.
- The entry of newer bond ETFs comes at a time when traditional bond funds are only just emerging from a painful period of multiple credit defaults. Investors are wary.
- Bond ETFs claim to be different from traditional bond funds by offering high liquidity, transparency and lower costs.
- The cost angle is the most distinguishing facet of bond ETFs. Being passively managed products, these charge a much lower fee than actively managed bond funds. Sometimes even less than 0.5%.
- In the debt segment, there is not much the fund manager can do to enhance returns. Any strategy that can optimise costs is the need of the hour.
- Globally, Bond ETFs have reported a healthy growth over the last decade. The size of Global Bond ETFs now accounts for over \$1 trillion assets under management (AUM) out of total \$4 trillion AUM across various ETFs.

Key objectives of launching Bond ETF:

- To suffice borrowing needs of CPSEs
- To increase retail participation
- To deepen the bond market and increase liquidity

What are Bond ETFs?

- Bond ETFs are a type of ETF that exclusively invests in bonds. Bond ETFs invest in various fixed-income securities such as corporate bonds, treasuries, municipal, international, high-yield, etc.
- Bond ETFs are passively managed and trade, much like stock ETFs on major stock exchanges. This helps promote market stability by adding liquidity and transparency during times of stress.
- Bond ETFs allow ordinary investors to gain passive exposure to benchmark bond indices in an inexpensive way.
- Investors of bond ETFs are exposed to the risk of interest rate changes.
- Bond ETFs are typically of two types: They either track a specific maturity bucket like short, medium or long term or they track a target maturity where they invest in bonds with similar maturity as the product.
- Target Maturity Bond ETFs: They provide predictable returns like Fixed Maturity Plans (FMPs), if they are held till maturity.

47

SETTING UP OF NATIONAL INVESTMENT & MANUFACTURING ZONES

- Government notified the National Manufacturing Policy(NMP) in 2011.
- The Policy is based on the principle of industrial growth in partnership with the States. National Investment & Manufacturing Zones (NIMZs) are one of the important instruments of the policy. Government has already granted final approval to the NIMZ in Sangareddy district, Telangana. Further, the proposal for granting final approval of establishment of Hyderabad Pharma City NIMZ in Rangareddy district, Telangana has been considered and recommended by the High Level Committee (HLC).
- A letter of Chief Minister of Telangana was received in which CM has requested to release an amount of Rs. 500 Crores for development of external and internal infrastructure under Phase-1 of Zaheerabad NIMZ in Sangareddy district of Telangana. In this regard, Department for Promotion of Industry and Internal Trade(DPIIT) had already conveyed to the State Government of Telangana that DPIIT's financial commitment is limited to extending assistance of Rs. 3 crores for funding the cost of master planning.
- For development of infrastructure in the NIMZ, the role of DPIIT is limited to coordination and no finances from DPIIT are committed for this purpose. The project proposals need to be prepared by the State Government and processed for approval as per norms and procedures applicable to Central Sector/ Centrally Sponsored/State Sector schemes/projects. DPIIT will forward such requisitions to the concerned Ministries and coordinate between State Government and line Ministries.
- DPIIT has already released Rs. 3 Crores to the SPV of NIMZ for funding the cost of master planning of NIMZ in Sangareddy district of Telangana. The Department had also forwarded the proposals, submitted by TSIIC, of External infrastructure linkages, i.e. Road linkages and Rail linkages, for phase-1 of the said NIMZ to the Ministry of Road Transport and Highways and Ministry of Railways respectively. The comments of Ministry of Railways have already been conveyed to Government of Telangana. Further, no proposal for internal infrastructure in the NIMZ has been received from the State Government.
- The progress of NIMZ in Sangareddy district of Telangana was further reviewed on 14th November, 2019, in the 6th meeting of High Level Committee.

48 STATUS OF LEATHER INDUSTRY:

The following measures have been taken by the Government for promotion of leather industry in the past three years:

- Central sector scheme 'Indian Footwear, Leather & Accessories Development Programme' is under implementation for the period 2017-18 to 2019-20. The scheme aims at development of infrastructure for the leather sector, address environment concerns specific to the leather sector, facilitate additional investments, employment generation and increase in production. Details of the Indian Footwear, Leather & Accessories Development Programme are enclosed as Annexure.
- Human Resource Development (HRD) sub-scheme: HRD sub-scheme provides assistance for Placement Linked Skill Development training to unemployed persons at Rs. 15,000 per person, for skill up-gradation training to employed workers at Rs. 5,000 per employee and for training of trainers at Rs. 2 lakh per person.
- Integrated Development of Leather Sector (IDLS) sub-scheme: IDLS sub-scheme incentivizes investment and manufacturing including job creation by providing backend investment grant/subsidy at 30% of the cost of new Plant and Machinery to Micro, Small & Medium Enterprises (MSMEs) and at 20% of the cost of Plant and Machinery to other units for Modernization /technology upgradation in existing units and also for setting up of new units.
- Establishment of Institutional Facilities sub-scheme: The sub-scheme provides assistance to Footwear Design & Development Institute (FDDI) for upgradation of some of the existing campuses of FDDI into "Centres of Excellence" and establishing 3 new fully equipped skill centres alongside the upcoming Mega Leather Cluster.
- Mega Leather, Footwear and Accessories Cluster (MLFAC) sub-scheme: The MLFAC sub-scheme provides infrastructure support to the Leather, Footwear and Accessories Sector by establishment of Mega Leather, Footwear and Accessories Cluster. Graded assistance is provided up to 50% of the eligible project cost, excluding cost of land with maximum Government assistance being limited to Rs. 125 crore.
- Leather Technology, Innovation and Environmental Issues sub-scheme: Under this sub-scheme, assistance is provided for upgradation/installation of Common Effluent Treatment Plants (CETPs) at 70% of the project cost. The sub-scheme also provides for support to national level sectoral industry council/ association and support for preparation of vision document for Leather Footwear and Accessories Sector.
- Promotion of Indian Brands in Leather, Footwear and Accessories Sector sub-scheme: Under this sub-scheme, the eligible units approved for Brand Promotion are assisted. The Government assistance is limited to 50% of total project cost subject to a limit of Rs.3 crore for each brand, each year for 3 years.
- Additional Employment Incentive for Leather, Footwear and Accessories Sector sub-scheme: Under this sub-scheme, employers' contribution of 3.67% to Employees' Provident Fund for all new employees in Leather, Footwear and Accessories sector, are provided for enrolling in EPFO for first 3 years of their employment.
- This information was given by the Minister of Commerce and Industry, Piyush Goyal, in a written reply in the Lok Sabha today.

49 DRAFT NATIONAL LOGISTIC POLICY

- The vision of the proposed policy is to drive economic growth and business competitiveness of the country through an integrated, seamless, efficient, reliable, green, sustainable and cost effective logistics network leveraging the best in technology, processes and skilled manpower.
- While, there is no official estimation of logistics cost for India, some private institutions have estimated the logistics cost to be 13 to 14 percent of the GDP. The proposed policy aims to reduce this to 9 -10 percent of the GDP.

- In order to simplify documentation for exports and imports through digitization, Department of Revenue, CBIC have taken several initiatives like (i) SWIFT (Single Window Interface For Trade) (ii) Adoption of Digital Signature (iii) 24x7 Customs Clearance – for ‘facilitated’ Bills of Entry and factory stuffed containers and goods exported under free Shipping Bills at select ports (iv) Import Data Processing and Management System (IDPMS) – jointly launched with RBI to facilitate efficient data processing for payment of imports and effective monitoring (v) E-Sanchit (vi) Two new IT Modules ICEDASH i.e (Ease of doing business monitoring dashboard) and ATITHI app for electronic filing by passengers for baggage (vii) PCS 1X which is a platform for port related processes developed by Indian Ports Association.

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PREDATORY PRICING BY E-COMMERCE COMPANIES

- Department for Promotion Industry and Internal Trade (DPIIT) in 2016 notified Guidelines for FDI on e-commerce. However, allegations were made against e-commerce companies that the marketplaces were violating the norms laid down in 2016.
- In 2018 DPIIT provided further clarification on FDI policy in relation to e-commerce. It stipulates that e-commerce entities providing market place will not directly or indirectly influence the sale price of goods or services and will maintain level playing field. Services should be provided by e-commerce marketplace entity or other entities in which e-commerce marketplace entity has direct or indirect equity participation or common control, to vendors on the platform at arm’s length and in a fair and non-discriminatory manner. Such services will include but not limited to fulfilment, logistics, warehousing, advertisement/marketing, payments, financing etc. Cash back provided by group companies of marketplace entity to buyers will be fair and non-discriminatory.
- Confederation of All India Traders (CAIT) has represented that large e-commerce platforms are in violation of Press Note 2 of 2018 of the FDI Policy as they are engaging in predatory pricing and are providing excessive discounts.
- In this regard, responses/clarifications were sought from e-commerce companies concerned on the allegations made by CAIT. All e-commerce companies, in their responses have maintained that they do not exercise any control over sellers and operate a pure marketplace. Any discount which is offered are offered by the seller/vendor or the respective brand alone.
- CAIT has also filed a petition with the Jodhpur Bench of Rajasthan High Court alleging FDI policy violations by e-commerce companies like Flipkart and Amazon which is sub-judice.
- Imposition of unfair or discriminatory prices (including predatory pricing) by a dominant enterprise or group is prohibited under provisions of Section 4 of the Competition Act, 2002. The Act provides for establishment of a quasi-judicial body viz the Competition Commission of India (CCI) which decides matters of anti-competitive practices, including inter alia predatory pricing, on a reference by the aggrieved party.

51

MEETING OF THE ECONOMIC ADVISORY COUNCIL

- The fifth meeting of the Economic Advisory Council of the Fifteenth Finance Commission (XVFC) was held recently.

Important issues discussed:

- Possible macro assumptions for the Commission’s award period relating to real growth, inflation etc were discussed in detail.
- Structural shift in inflation, the relationship between the GDP deflator and the consumer price inflation and possible trajectories of movement in real activity were discussed.

- Tax revenues and expenditure patterns emerging both at the Union and the States level.
- A possible way to improve tax collection for additional resource mobilization.
- Issues related to stabilization of Goods & Services Tax (GST), the relationship between GST Council and Finance Commission and GST compensation being paid to States.
- Issues related to compliance and adherence to Fiscal responsibility legislations (FRLs) enacted by respective governments.

52 GEM SAMVAAD:

The Government e-Marketplace (GeM) has launched the '**GeM Samvaad**', a national outreach Programme.

About GeM:

- Government e-Marketplace (GeM), launched in 2016, is the national public procurement portal offering end to end solutions for all procurement needs of Central and State Government Departments, PSUs, autonomous institutions and local bodies.
- GeM has more than 15 lakh products and around 20,000 services, more than 3 lakh registered sellers and service providers and more than 40,000 Government buyer organizations. In its short journey of three years, GeM has processed more than 28 lakh orders worth Rs. 40,000 crores in Gross Merchandise Value out of which 50% has been transacted by MSMEs.
 - State Departments and Organizations and Public Sector Enterprises (PSEs) have been using GeM for their buying needs.
 - Sellers from the State are also benefitting through the access to the national Public Procurement market using the portal.
 - Through GeM Samvaad the marketplace is looking forward to receiving feedback from users which shall be used for making improvements and advancements in the system.

53 RECYCLING OF SHIPS ACT, 2019

The Recycling of Ships Bill, 2019 has received the assent of President of India.

Key-takeaways from the Act:

- The Recycling of Ships Act, 2019 provides for the regulation of recycling of ships by setting certain international standards and laying down the statutory mechanism for enforcement of such standards.

No to hazardous materials:

- It restricts and prohibits the use or installation of hazardous materials, which applies irrespective of whether a ship is meant for recycling or not.
- For new ships, such restriction or prohibition on the use of hazardous materials will be immediate, while existing ships shall have a period of five years for compliance.
- Restriction or prohibition on the use of hazardous materials would not be applied to warships and non-commercial ships operated by Government.

Proper authorisation for recycling:

- Ship recycling facilities are required to be authorized and ships shall be recycled only in such authorized ship recycling facilities.
- This Act 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 Hong Kong International Convention.
- It imposes a statutory duty on ship recyclers to ensure safe and environmentally sound removal and management of hazardous wastes from ships.

Hong Kong International Convention (HKC):

- The Government has also decided to accede to the Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships, 2009.
- Accordingly, India has acceded to Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships, 2009 on 28th November 2019.
- Accession to HKC by India and enactment of Recycling of Ships Act, 2019 will raise the profile of India's ship recycling industry as being environment-friendly and safety conscious and would go a long way in consolidating India's position as the market leader.

Tripura gets its first SEZ:

- The Ministry of Commerce and Industry has notified the setting up of the first-ever Special Economic Zone (SEZ) in Tripura.
- The SEZ is being set-up at Paschim Jalefa, Sabroom, South Tripura District, which is 130 km away from Agartala.
- It will be a Sector-Specific Economic Zone for Agro-Based Food Processing.

Special Economic Zone (SEZ) is a geographical region that has economic laws different from a country's typical economic laws. Usually, the goal is to increase foreign investments. SEZs have been established in several countries, including China, India, Jordan, Poland, Kazakhstan, Philippines and Russia.

Significance:

- **Employment opportunities:** The SEZ is estimated to generate 12,000 skilled jobs. Rubber-based industries, textile and Apparel Industries, bamboo and Agri-food Processing Industries will be set-up in the SEZ.
- **Attracting investment:** Setting up of the SEZ in Sabroom will open up new avenues to attract private investment considering the proximity of the Chittagong Port and construction of the bridge across Feni River in South Tripura which is underway.
- **Tax exemptions:** After it is set up, 100 percent Income Tax exemption will be provided on export income for SEZ units under Section 10AA of the Income Tax Act for the first 5 years. Also, 50 percent exemption will be provided for the next 5 years and 50 percent of the ploughed back export profit for another 5 years.

- The 38th meeting of the GST Council met under the Chairmanship of the Union Minister for Finance & Corporate Affairs Smt. Nirmala Sitharaman.
- The GST Council recommended the following:

- Grievance Redressal Committees (GRC) will be constituted at Zonal/State level with both CGST and SGST officers and including representatives of trade and industry and other GST stakeholders (GST practitioners and GSTN etc.). These committees will address grievances of specific/ general nature of taxpayers at the Zonal/ State level.
- The due date for annual return in FORM GSTR-9 and reconciliation statement in FORM GSTR-9C for FY 2017-18 to be extended to 31.01.2020.
- Following measures would be taken to improve filing of FORM GSTR-1:
 - waiver of a late fee to be given to all taxpayers in respect of all pending FORM GSTR-1 from July 2017 to November 2019, if the same is filed by 10.01.2020.
 - E-way bill for taxpayers who have not filed their FORM GSTR-1 for two tax periods shall be blocked.
- Input tax credit to the recipient in respect of invoices or debit notes that are not reflected in his Form GSTR-2A shall be restricted to 10 per cent of the eligible credit available in respect of invoices or debit notes reflected in his Form GSTR-2A.
- To check the menace of fake invoices, suitable action to be taken for blocking of fraudulently availed input tax credit in certain situations.
- A Standard Operating Procedure for tax officers would be issued in respect of action to be taken in cases of non-filing of FORM GSTR 3B returns.
- Due date of filing GST returns for the month of November 2019 to be extended in respect of a few North Eastern States.
- Various law amendments to be introduced in Budget 2020

55**THE FIRST SILK PROCESSING PLANT IN GUJARAT**

- In a historic initiative was taken by Khadi and Village Industries Commission (KVIC), a first Silk Processing Plant has been inaugurated at Surendranagar in Gujarat.
- The initiative aims to help cut down the cost of production of silk yarn drastically and increase the sale and availability of raw material for Gujarati Patola Sarees locally.

A brief note on Patola Sarees:

- Patola, the trademark Saree of Gujarat, is considered to be very costly and worn only by the Royals or the Aristocrat.
- Reason being the raw material silk yarn is purchased from Karnataka or West Bengal, where silk processing units are situated, thus increasing the cost of the fabric manifolds.
- Patola Silk Saree is amongst the top five silk weaves which are desired in every Indian Saree Lover's wardrobe.

56**NITI AAYOG RELEASES ITS VISION FOR THE NATIONAL DATA AND ANALYTICS PLATFORM**

- NITI Aayog released its vision for the National Data and Analytics Platform (NDAP).
- The platform aims to democratize access to publicly available government data.
- It will host the latest datasets from various government websites, present them coherently, and provide tools for analytics and visualization.

- NDAP will follow a user-centric approach and will enable data access in a simple and intuitive portal tailored to the needs of a variety of stakeholders.
- NDAP will spearhead the standardization of formats in which data is presented across sectors and will cater to a wide audience of policymakers, researchers, innovators, data scientists, journalists and citizens.

57 NATIONAL LOGISTICS POLICY

The government has announced that a National Logistics Policy will be released soon, which will clarify the roles of the Union Government, State Governments and key regulators.

India's Logistics Sector:

- India's logistics sector is highly defragmented and the aim is to reduce the logistics cost from the present 14% of GDP to less than 10% by 2022.
- The Indian logistics sector provides livelihood to more than 22 million people and improving the sector will facilitate a 10 % decrease in indirect logistics cost leading to the growth of 5 to 8% in exports.
- Further, it is estimated that the worth of the Indian logistics market will be around USD 215 billion in the next two years compared to about USD 160 billion at present.

Significance of national policy:

- The policy will create a single-window e-logistics market and focus on the generation of employment, skills and make MSMEs competitive.
- It will improve India's trade competitiveness, create more jobs, improve India's performance in global rankings and pave the way for India to become a logistics hub.

58 UTTARAKHAND'S FIRST HELI SERVICES UNDER UDAN FLAGGED OFF

- Ministry of Civil Aviation (MoCA) operationalized the first-ever helicopter services from Dehradun's Sahasradhara helipad to Gauchar, and Chinyalisaur under the Regional Connectivity Scheme – Ude Desh Ka Aam Nagrik (RCS-UDAN) of Government of India.
- The inauguration of the helicopter routes in the Uttarakhand region is in line with the objective of the Ministry of Civil Aviation to enhance the aerial connectivity of the hilly areas in the country.
- UDAN, which stands for 'Ude Desh Ka Aam Nagrik', aims to make air travel affordable and widespread.

59 GULFOOD 2020

- Union Minister for Food Processing Industries inaugurated the India Pavilion at 25th Edition of the GulFood 2020, Dubai.
- FPI Minister took a tour of the fair and interacted with the Indian exhibitors and urged them to make use of the platform of GulFood 2020 for facilitating tie ups between foreign investors and accelerate the pace of export of food products from India to the western market.

- The Minister, while interacting with the exhibitors, discussed the potential of business opportunities available to them in India, UAE and other countries.
- Based on the discussions it was proposed to explore the possibility of setting up a fund for providing marketing support to launch Indian products in the UAE super markets.
- India and UAE have been amongst each other's largest trading partners for the last several years.
- Currently UAE is the third largest trading partner with bilateral trade reaching US\$ 59.909 in 2018-19.
- Food Processing Sector in India being a sunrise sector is poised for exponential growth and has emerged as a high growth sector due to its immense potential for value addition, ability to control inflation and ensure remunerative prices to farmers.
- Food items are one of the major Indian exports to UAE. While India is rich in production of food grains, fruits, vegetables & milk but lacks in processing infrastructure, UAE has surplus funds and technology available to create such facilities but lacks in availability of raw material. Thus a partnership between India and UAE can ensure Food Security for the Gulf nation in the times to come.

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KALA KUMBH – HANDICRAFTS EXHIBITIONS FOR PROMOTION OF GI CRAFTS

- With an objective to promote Geographical Indication (GI) crafts and heritage of India the Ministry of Textiles is organising Kala Kumbh - Handicrafts Thematic Exhibition in various parts of the country through the Office of Development Commissioner (Handicrafts).
- The exhibitions are planned in various major cities like Bengaluru, Mumbai, Kolkata and Chennai.
- The GI tag is used on handicrafts which correspond to a specific geographical location or origin (e.g., a town, region, or country).
- 178 GI handicraft products were registered from all over India.
- The artisans are the backbone of Indian handicraft sector and possess inherent skill, technical and traditional craftsmanship.
- In Bengaluru exhibition, GI crafts like Mysore rosewood inlay, Channapatna lacquerware, Dharwad kasuti embroidery, Kolhapur chappal, Bidriware, Molakalmur handblock printing, Ananthapur leather puppet, Thrissur screwpine, Vishakapatna lacquerware, Sandur lambani embroidery, Jodhpur terracota, Jaipur handprinted textile, bronze casting, Medinipur mat weaving, Birbhum artistic leather and Khurdah palm leaf engraving are being displayed.
- In Mumbai exhibition GI crafts like Chittoor kalamkari painting, Thrissur screwpine crafts, Pokharan terracotta crafts, Kutch embroidery & crochet crafts, Pingla patachitra, Birbhum kantha embroidery, Jajpur photachitra painting, Madhubani Mithila painting, Kolhapur chappal, Palghar Worli painting, Kondagaon wrought iron craft, Agate stone crafts and Krishna handblock printing are being displayed.

61

INTERNATIONAL CONFERENCE ON NANO SCIENCE AND NANO TECHNOLOGY (ICONSAT)

The International Conference on Nano Science and Nano Technology (ICONSAT) under the aegis of Nano Mission, Department of Science and Technology (DST), conducted in Kolkata focusing on the recent advances in this frontier research field.

What is Nano Mission?

- The Government of India launched a Mission on Nano Science and Technology (Nano Mission) in May 2007.

- This 'nano-mission' has been working to help scientists, institutions and the industry in terms of promoting basic research, development of adequate manpower resources, international collaborations, augmentation the infrastructure for research and generation of socially useful products.
- Nano Technology is a 'knowledge-intensive & enabling technology' which is expected to influence a wide range of products and processes with far-reaching implications for the national economy and development.

62 THE MINERAL LAWS (AMENDMENT) BILL, 2020

Parliament passed **The Mineral Laws (Amendment) Bill, 2020** for amendments in **Mines & Mineral (Development and Regulation) Act 1957** and **The Coal Mines (Special Provisions) Act, 2015**.

Key-highlights of the Bill:

- The Bill replaces the ordinance for amendment of the MMDR Act 1957 and CMSP Act which was promulgated on 11th January 2020.

Significance of the Bill:

- The Bill will open a new era in Indian coal & mining sector especially to promote Ease of Doing Business.
- Furthermore, it will transform the mining sector in the country boosting coal production and reducing dependence on imports.

63 SCHEME FOR REMISSION OF DUTIES AND TAXES ON EXPORTED PRODUCTS (RODTEP)

The Cabinet Committee has given its approval for introducing the **Scheme for Remission of Duties and Taxes on Exported Products (RoDTEP)** under which a mechanism would be created for reimbursement of taxes/ duties/ levies, at the central, state and local level, which are currently not being refunded under any other mechanism, but which are incurred in the process of manufacture and distribution of exported products.

About the Scheme:

- Under the Scheme, an inter-ministerial Committee will determine the rates and items for which the reimbursement of taxes and duties would be provided.
- In line with "*Digital India*", refund under the Scheme, in the form of transferable duty credit/electronic scrip will be issued to the exporters, which will be maintained in an electronic ledger.
- The Scheme will be implemented with end to end digitization.
- The refunds under the RoDTEP scheme would be a step towards "*zero-rating*" of exports, along with refunds such as Drawback and IGST.
- At present, GST taxes and import/customs duties for inputs required to manufacture exported products are either exempted or refunded.
- However, certain taxes/duties/levies are outside GST and are not refunded for exports, such as VAT on fuel used in transportation, Mandi tax, Duty on electricity used during manufacturing etc.
- These would be covered for reimbursement under the RoDTEP Scheme.

Significance of the Scheme:

- This scheme is going to give a boost to the domestic industry and Indian exports providing a level playing field for Indian producers in the International market so that domestic taxes/duties are not exported.
- This would lead to cost competitiveness of exported products in international markets and better employment opportunities in export-oriented manufacturing industries.

64

SCHEME FOR PROMOTION OF MANUFACTURING OF ELECTRONIC COMPONENTS AND SEMICONDUCTORS (SPECS)

- The Union Cabinet chaired has approved to offer financial incentive of 25% of capital expenditure for the manufacturing of goods that constitute the supply chain of an electronic product under the **Scheme for Promotion of manufacturing of Electronic Components and Semiconductors (SPECS)**.
- The scheme will help offset the disability for domestic manufacturing of electronic components and semiconductors in order to strengthen the electronic manufacturing ecosystem in the country.
- The proposal when implemented will lead to the development of electronic components manufacturing ecosystem in the country.

65

RECAPITALIZATION OF REGIONAL RURAL BANKS (RRBS)

- The Cabinet Committee has given its approval for continuation of the process of recapitalization of Regional Rural Banks (RRBs) by providing minimum regulatory capital to RRBs for another year beyond 2019-20, that is, up to 2020-21 for those RRBs which are unable to maintain minimum Capital to Risk weighted Assets Ratio (CRAR) of 9%, as per the regulatory norms prescribed by the Reserve Bank of India.
- The CCEA also approved utilization of Rs.670 crore as central government share for the scheme of Recapitalization of RRBs (i.e. 50% of the total recapitalization support of Rs.1340 crore).

Rural Regional Banks:

- RRBs are primarily catering to the credit and banking requirements of agriculture sector and rural areas with focus on small and marginal farmers, micro & small enterprises, rural artisans and weaker sections of the society.
- In addition, RRBs also provide lending to micro/small enterprises and small entrepreneurs in rural areas.
- As per RBI guidelines, the RRBs have to provide 75% of their total credit under PSL (Priority Sector Lending).
- With the recapitalization support to augment CRAR, RRBs would be able to continue their lending to these categories of borrowers under their PSL target, and thus, continue to support rural livelihoods.

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11



INFRASTRUCTURE

1

INLAND WATERWAYS AUTHORITY OF INDIA (IWAI) AND INDIAN OIL (IOCL) SIGN MOU ON FUEL NEEDS FOR NATIONAL WATERWAYS

Context:

- Inland Waterways Authority of India (IWAI) and Indian Oil Corporation Limited (IOCL) signed a Memorandum of Understanding (MoU) for jointly developing infrastructure for fuels, lubricating oil, LPG, Natural Gas and any other related fuel and gas for meeting the requirement of National Waterways.

About:

- The MoU will provide for an understanding over general modalities of mutual cooperation leading to addressing futuristic demand of any form of energy for Inland Waterways and associated services.
- It also covers development of infrastructure for receipt, storage, dispensing and supply of fuels, lubricating oils, Liquefied Petroleum Gas (LPG) (for domestic & commercial use), Natural Gas (NG) and any other related fuel and gas. In addition to this the MoU will also cover infrastructure development for setting up Consumer Pump (for supplying fuels to vehicles, locomotives, machinery & equipments etc.) and Retail Outlets (for fuel & gas) at Terminals/ Multimodal terminals. This will further lead to development of business activities along the National Waterways.
- IWAI and IOCL have agreed to conduct techno-economic feasibility studies for preparation of detailed land requirement, storage facilities and other supporting infrastructure with details of the cost. These studies will be based on the traffic potential, proximity to the local industries and waterways and its connectivity to rail heads.
- IWAI will extend all necessary assistance in sharing information, providing necessary inputs and available data / information relating to National Waterways and its terminals with IOCL for implementing projects.
- IWAI will also provide land to IOCL on long term lease basis for developing facilities at existing terminals within the approved guidelines of land lease policy of the Government.
- As per National Waterways Act 2016, 106 new National waterways have been declared in addition to existing 5 National Waterways. The development of new National Waterways is being taken up in a phased manner based on the feasibility reports and DPRs. Also, the capacity augmentation of NW-1 has been taken up under Jal Marg Vikas Project (JMVP) with the technical and financial assistance of the World Bank.
- Under the JMVP, multimodal terminals are being developed at Haldia, Sahibganj, Varanasi and Intermodal terminals are being developed at Ghazipur and Kalughat. Also, Least Assured Depth (LAD) will be provided between Haldia and Varanasi for safe navigation of vessels.

2

NATIONAL MINERAL POLICY, 2019

Context:

- The Union Cabinet, chaired by the Prime Minister has approved National Mineral Policy 2019.

About:

- The aim of National Mineral Policy 2019 is to have a more effective, meaningful and implementable policy that brings in further transparency, better regulation and enforcement, balanced social and economic growth as well as sustainable mining practices.

Benefits:

- The New National Mineral Policy will ensure more effective regulation. It will lead to sustainable mining sector development in future while addressing the issues of project affected persons especially those residing in tribal areas

Details:

- The National Mineral Policy 2019 includes provisions which will give boost to mining sector such as
 - Encouraging the private sector to take up exploration,
 - Encouragement of merger and acquisition of mining entities and
 - Transfer of mining leases and creation of dedicated mineral corridors to boost private sector mining areas.
- The 2019 Policy proposes to grant status of industry to mining activity to boost financing of mining for private sector and for acquisitions of mineral assets in other countries by private sector
- It also mentions that Long term import export policy for mineral will help private sector in better planning and stability in business
- The Policy also mentions rationalize reserved areas given to PSUs which have not been used and to put these areas to auction, which will give more opportunity to private sector for participation
- The Policy also mentions to make efforts to harmonize taxes, levies & royalty with world benchmarks to help private sector
- Among the changes introduced in the National Mineral Policy, 2019 include the focus on make in India initiative and Gender sensitivity in terms of the vision. In so far as the regulation in Minerals is concerned, E-Governance, IT enabled systems, awareness and Information campaigns have been incorporated.
- Regarding the role of state in mineral development online public portal with provision for generating triggers at higher level in the event of delay of clearances has been put in place. NMP 2019 aims to attract private investment through incentives while the efforts would be made to maintain a database of mineral resources and tenements under mining tenement systems.
- The new policy focuses on use coastal waterways and inland shipping for evacuation and transportation of minerals and encourages dedicated mineral corridors to facilitate the transportation of minerals.
- The utilization of the district mineral fund for equitable development of project affected persons and areas. NMP 2019 proposes a long term export import policy for the mineral sector to provide stability and as an incentive for investing in large scale commercial mining activity.
- The 2019 Policy also introduces the concept of Inter-Generational Equity that deals with the well-being not only of the present generation but also of the generations to come and also proposes to constitute an inter-ministerial body to institutionalize the mechanism for ensuring sustainable development in mining.
- National Mineral Policy 2019 replaces the extant National Mineral Policy 2008 ("NMP 2008") which was announced in year 2008.

3**PRADHAN MANTRI JI-VAN YOJANA****Context:**

- The Cabinet Committee on Economic Affairs, chaired by Hon'ble Prime Minister has approved the "Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran Anukool fasal awashesh Nivaran) Yojana" for providing financial support to Integrated Bio ethanol Projects using lignocellulosic biomass and other renewable feedstock.

About:

- The scheme focuses to incentivise 2G Ethanol sector and support this nascent industry by creating a suitable ecosystem for setting up commercial projects and increasing Research & Development in this area.

Salient Features:

- Apart from supplementing the targets envisaged by the Government under EBP programme, the scheme will also have the following benefits:
 - Meeting Government of India vision of reducing import dependence by way of substituting fossil fuels with Bio fuels.
 - Achieving the GHG emissions reduction targets through progressive blending/ substitution of fossil fuels.
 - Addressing environment concerns caused due to burning of biomass/ crop residues & improves health of citizens.
 - Improving farmer income by providing them remunerative income for their otherwise waste agriculture residues.
 - Creating rural & urban employment opportunities in 2G Ethanol projects and Biomass supply chain.
 - Contributing to Swachh Bharat Mission by supporting the aggregation of non-food bio fuel feedstock's such as waste biomass and urban waste.
 - Indigenizing of Second Generation Biomass to Ethanol technologies.
- The ethanol produced by the scheme beneficiaries will be mandatorily supplied to Oil Marketing Companies (OMCs) to further enhance the blending percentage under EBP Programme.
- Ministry of Petroleum & Natural Gas has targeted to achieve **10%** blending percentage of Ethanol in petrol by 2022. Despite efforts of the Government such as higher ethanol prices and simplification of ethanol purchase system, the highest ever ethanol procurement stands around 150 crore litres during Ethanol supply year 2017-18 which is sufficient for around **4.22%** blending on Pan India basis. Therefore, an alternate route viz. Second Generation (2G) Ethanol from biomass and other wastes is being explored by MoP & NG to bridge the supply gap for EBP programme. In this direction, "Pradhan Mantri JI-VAN Yojana" is being launched as a tool to create 2G Ethanol capacity in the country and attract investments in this new sector.

4

TRIPARTITE AGREEMENT WITH FRENCH NATIONAL RAILWAYS (SNCF) & AFD ON RAILWAY

Context:

- Indian Railway Station Development Corporation (IRSDC) entered a Tripartite Agreement with French Railways (SNCF) & AFD, a French Agency on 10th June, 2019.

About:

- Under this agreement, AFD a French agency has agreed to provide in-kind grant through French National Railways IRSDC to support the Railway Station Development Program in India.
- This will impose no financial liability on IRSDC or Indian Railways.
- India and France have a strong and long standing prosperous partnership in the Railway sector. French Railways (SNCF) in the past has been associated with Indian Railways in conducting speed upgradation study for Delhi-Chandigarh section and station development of Ludhiana & Ambala stations.
- This effort will go a long way in further strengthening Indo-French cooperation and will help Indian Railways in positioning its stations to world class standards.

5

COAL SUPPLY RATIONALIZATION SCHEME**Context:**

- Ministry of Coal issued the Policy for Linkage Rationalization for Independent Power Producers (IPPs).

About:

- The policy envisages to undertake a comprehensive review of existing sources of coal and consider the feasibility for rationalization of sources with a view to optimize the transportation cost and materialization taking into account coal availability and logistics.
- This exercise is aimed at reducing transportation distance and so the necessary savings shall be on the account of savings in transportation costs which shall be passed on appropriately.

Recommendation of inter-ministerial task force (IMTF):

- An Inter-Ministerial Task Force (IMTF) was constituted to undertake a comprehensive review of existing coal sources of Independent Power Producers (IPPs) having linkages and consider the feasibility for rationalization of these sources with a view to optimize transportation cost, given the various technical constraints.
- The recommendation of the IMTF has been approved by the Competent Authority.

Point-wise details :

- Coal linkage rationalization shall be an exercise in which the coal linkage of a Thermal Power Plant (TPP) of an Independent Power Producer (IPP) may be transferred from one Coal Company to another based on the availability during the fiscal and future coal production plan of the coal company.
- The underlying objective behind the exercise shall be to reduce the landed cost of coal due to reduction in transportation cost. The savings achieved due to this reduction of landed price of coal are required to be passed on to the Discom/consumer of power.
- This exercise shall be voluntary on the part of the TPPs.

6

MODERNIZATION OF RAILWAY STATIONS**About:**

- Modernisation/upgradation of Railway station in Indian Railways is a continuous and on-going process. This has been undertaken from time to time under various modernization schemes such as Model Station Scheme, Modern Station Scheme and Adarsh Station Scheme. The 'Model Station Scheme' (June, 1999 to November, 2008) and the 'Modern Station Scheme' (2006-07 and 2007-08) have since been discontinued.
- At present, upgradation of stations is undertaken under Adarsh Station Scheme. Selection of Railway stations under Adarsh Station Scheme is based on the identified need for upgradation of amenities. Besides there are other policies/initiatives by Indian Railways to provide improved facilities at all stations.
- Recently, a separate policy has been made for development of stations under Station Redevelopment Programme through Indian Railway Stations Development Corporation Limited (IRSDC) on 'as is where is' basis.
- Government has approved Railways' proposal for redevelopment of railway stations by IRSDC as Nodal Agency, through simplified procedures and for longer lease tenure. Accordingly, all the stations on Indian Railways have been entrusted to IRSDC and other Government agencies for undertaking the techno-economic feasibility studies.

- Based on the outcome of the feasibility studies, stations are planned to be taken up for redevelopment in phases especially the stations located in major cities, pilgrimage centres and important tourist destinations. Redevelopment of stations is planned through leveraging of commercial development of vacant land/air space in and around stations.
- Construction and Modernization of all the railway stations in the country is a need based ongoing process subject to commercial justification, operational requirement, technical feasibility and resource availability.

7 IWAI SHIP

Context:

- Ministry of State for Shipping (Independent Charge) and Chemical & Fertilizers flagged-off a ship of the Inland Waterways Authority of India (IWAI), carrying stone from Bhutan to be delivered in Bangladesh..

About:

- This is for the first time ever that an Indian waterway is being used for transport of cargo between two countries, using India for transit.
- The ship – MV AAI – has set sail from Dhubri in Assam and will travel to Narayanganj in Bangladesh, over river Brahmaputra and the Indo Bangladesh Protocol Route.
- Till now, Bhutan has been exporting significant quantity of stone aggregates to Bangladesh through the land route.

Inland Waterways Authority of India (IWAI)

- It is the apex statutory body created in 1986 for the development and regulation of inland waterways has been designated as the Project Implementing Agency by the ministry of shipping.
- Headquartered in Noida, it is under the Ministry of Shipping.

8 THE BROADBAND READINESS INDEX (BRI) FOR INDIAN STATES AND UNION TERRITORIES

Context:

- The Department of Telecom (DoT) and the Indian Council for Research on International Economic Relations (ICRIER) signed a Memorandum of Understanding (MoU) to develop a Broadband Readiness Index (BRI) for Indian States and Union Territories (UT).

About:

- The first estimate will be made in 2019 and subsequently every year until 2022.
- The National Digital Communication Policy (NDCP) 2018 acknowledged the need for building a robust digital communications infrastructure leveraging existing assets of the broadcasting and power sectors including collaborative models involving state, local bodies and the private sector.
- Accordingly, the policy recommended that a BRI for States and UTs be developed to attract investments and address Right of Way (RoW) challenges across India.
- This index will appraise the condition of the underlying digital infrastructure and related factors at the State/UT level. Such an exercise will provide useful insights into strategic choices made by States for investment allocations in ICT programmes.
- In the spirit of competitive federalism, the index will encourage states to cross learn and jointly participate in achieving the overall objective of digital inclusion and development in India.

- The framework will not only evaluate a state's relative development but will also allow for better understanding of a state's strengths and weaknesses that can feed into evidence-based policy making.
- The methodology developed as a part of this research will be adapted and used on an annual basis for systematic evaluation of state-performance on metrics set out as the goals for 2022 under the new policy. As a result, ranking and understanding State/UT performance over time will be an important part of the exercise.

9

ACHIEVEMENTS OF MINISTRY OF CIVIL AVIATION**Context:**

- Ministry of Civil aviation has undertaken many initiatives in the direction of enabling affordable flying and healthy aviation sector growth.

Ministry/Agency: Ministry of Civil Aviation**About:**■ **Some of the key initiatives are:**

- **India's tallest Air Traffic Control tower** was inaugurated **at the Indira Gandhi International Airport** which will ensure up-scaled services and systems for efficient, smooth and uninterrupted air traffic management.
- **'Aviation Jobs'** is a unique web-based portal launched by Ministry of Civil Aviation which seeks to bring together job seekers and prospective employers in the Indian civil aviation sector. It is a common platform for enabling candidates to register their job interests across various sub-sectors. At the same time it facilitates sourcing of information about candidates available in the market by prospective employers with a view to improve prospects for employment or re-employment in the civil aviation ecosystem

■ **As part of Digital initiatives the Ministry has taken up following initiatives:**

- **eDGCA:** It is a project conceptualized to completely automate the processes and functions of DGCA and its constituent directorates as well as to provide a strong base for IT infrastructure and service delivery framework.
- **DigiSky-** an online portal to regulate the entire gamut of activities relating to governance and operation of Remotely Piloted Aircraft System (RPAS)/Unmanned Aircraft Vehicles (UAVs)/drones has been made operational. While ensuring safety and security in drone operations, it will also help in promotion of drone technologies.
- **Esahaj-**100% of security clearances pertaining to the Ministry have been made online on Esahaj online portal launched by the Ministry of Civil Aviation. The portal is operational for granting clearances in respect of 24 categories.
- **DigiYatra:** Trial for rollout of DigiYatra initiative has been started at Bangalore and Hyderabad airports. The initiative envisages seamless and hassle free passenger travel using biometric technologies to improve passenger experience, reduce queue waiting time as passengers can walk through e-gates by using advanced security solutions. It will remove redundancies at check points and enhance resource utilization.

10

'SEWA SERVICE' TRAINS**Context:**

- Indian Railways launched 09 Sewa Service trains.

About:

- These Sewa trains will provide connectivity to the far-flung areas where stoppages of premiere trains were not possible.
- These trains will act as link trains to serve the common man of the country.
- It is a unique concept to start these Sewa trains with layover/ spare rakes as a part of 'sweating of assets' initiative by the Indian Railways. This was part of strategies of Indian Railways to have better utilization of the rolling stock without any requisition for new rolling stock.
- These trains will be highly beneficial to the common people especially those who come to metro cities for jobs and education.
- These trains will run on the **"Hub and Spoke" Model**, thereby facilitating passengers to use these trains to reach the "Hub" for availing onward journey to other major stations.
- Indian Railways plans to run more trains on similar model to serve the passengers of smaller towns and cities. These measures are also expected to boost the earnings of the Indian Railways to help in strengthening the economy.

11

CHENANI NASHARI TUNNEL RENAMED AFTER DR SYAMA PRASAD MOOKERJEE

Context:

- Chenani Nashari Tunnel renamed after Dr Syama Prasad Mookerjee

About:

- This 9 km tunnel is the longest such state of art tunnel in the country, connecting Udhampur to Ramban in Jammu.
- Constructed at a cost of Rs 2500 crore, it cuts down 31 km of travel distance and reduces the travel time between the two points by about two hours, in addition to substantial saving in fuel cost.
- Renaming of the tunnel is a fitting tribute to Dr Syama Prasad Mookerjee, who sacrificed his life for the country and has been a source of inspiration for the nation.
- These include Ring Roads around both Jammu and Srinagar, and construction of Zojila Tunnel among others. He said these projects will be major game changers for the people of the state, bringing employment and socio-economic development.
- The Minister announced plans for construction of a new road alignment between Delhi and Katra in Jammu, which will reduce the travel time upto six hours.
- The new alignment will pass through the states of Haryana and Punjab.

12

INDIAN RAILWAY'S INTRODUCES 'UTTAM RAKE'

- 'Uttam Rake' is the Latest Addition to Make Travelling in Mumbai Local Trains More Comfortable & Safe.
- Uttam rake has improved interiors and advanced features to bring more comfort for Mumbaikars.
- Salient Features of Uttam rake:
 - Provision of CCTV Surveillance System in all coaches.
 - Anti-dent partitions in coaches to prevent thefts.

- Modular Luggage rack.
- High backrest seats in First Class coaches.
- Provision of Fibre Reinforced Plastic (FRP) seats in Second Class coaches with wooden finishing for better aesthetics.
- Improved Dual Lock Stopper with dual slot handles windows in all coaches.
- Wider and improved grab handles for better grip.
- Latest Brushless DC (BLDC) fans in all coaches which consumes 30% less energy than conventional fans.
- Provision of modular type diffused LED lights.
- Electrically operated Passenger Alarm System in place of traditional emergency chains.
- Smooth finished corrugated FRP ceiling and Wooden finished Roof Ventilation Duct Area to enhance the aesthetic appeal of coach interior.
- Provision of camouflaged aluminium moulded strips on floor to discourage theft.
- Stainless steel protective plate near all passenger seats to avoid colour fading due to footwear friction.
- Red Emergency Buttons.

13**HEAD ON GENERATION (HOG) SYSTEM IN INDIAN RAILWAYS**

- In a bid to control the pollution, Indian Railways has developed an improvised converter, Head on Generation (HOG), in electric locomotives.
- Premium passenger trains of Indian Railways with AC coaches generally run on the End-on-Generation (EOG) system. This adds to both air and noise pollution.
- HOG system utilizes power from overhead catenary in order to feed auxiliaries in the coaches hauled by electric locomotives. According to the Railway Ministry, it saves up to 1 million litres of diesel per train annually.
- Over the years, the locomotives that have been manufactured by Chittaranjan Locomotive Works (CLW) are HOG compliant. Moreover, from April 2018 onwards, the pace of HOG conversion works for Linke Hofmann Busch (LHB) coaches have been increased to harness the benefits of this high-end technology.
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14**NUGEN MOBILITY SUMMIT-2019**

- **Union Minister of Road Transport and Shipping** inaugurated NuGen Mobility Summit-2019 today at **International Center of Automotive Technology (ICAT), Manesar in Haryana.**

- The three-day conference is the **largest automotive technology event in the country so far**. Automotive technology experts from 15 countries including India will be presenting more than 120 technical research papers in this event. This conference will be **held from November 27 to 29, 2019**.
- The NuGen Mobility Summit 2019 is the **first in a series of the conference organized by ICAT**.
- Keeping in mind that New Generation Mobility shall be Green, safe and affordable, **the theme of this event has been setup around new generation topics like e-mobility, Hydrogen Mobility, Connected Vehicles and ITS**.
- The International Center of Automotive Technology (ICAT), Manesar is a **division of NATRIP Implementation Society (NATIS) under the Department of Heavy Industries**, Ministry of Heavy Industries and Public Enterprises, Government of India.

15 PHASE III OF PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY)

- The Government has launched Phase III of Pradhan Mantri Gram Sadak Yojana (PMGSY).
- The Phase-III of PMGSY aims at consolidation of 1,25,000 Kms Through Routes and Major Rural Links that connect habitations to Gramin Agricultural Markets (GrAMs), Higher Secondary Schools and Hospitals.
- The funding pattern for the PMGSY-III will be:
 - 60:40 between Centre and the States for States other than NE & Himalayan States
 - 90:10 for NE and Himalayan States

The Pradhan Mantri Gram Sadak Yojana (PMGSY), was launched by the Government of India in 2000 to provide connectivity to unconnected Habitations as part of a poverty reduction strategy. Simply put, it is a nationwide plan to provide good all-weather road connectivity to unconnected villages.

16 ROHTANG PASS TO BE RENAMED AFTER FORMER PRIME MINISTER ATAL BIHARI VAJPAYEE

Cabinet has approved Strategic Tunnel under Rohtang Pass to be renamed after former Prime Minister Atal Bihari Vajpayee.

Quick facts on the tunnel:

- The 8.8kilometre-long tunnel is the world's longest tunnel above an altitude of 3,000 metres.
- It is a 10.5-metre wide single tube bi-lane tunnel with a fireproof emergency egress tunnel built into the main tunnel itself.
- It will reduce the distance between Manali and Leh by 46 kilometres and save crores of rupees in transport costs
- The foundation stone for the Access Road to the South Portal of the tunnel was laid on May 26, 2002.
- The Border Roads Organisation (BRO) worked relentlessly to overcome major geological, terrain and weather challenges that included the most difficult stretch of the 587-metre Seri Nalah Fault Zone.
- The breakthrough from both ends was achieved on October 15, 2017.
- The tunnel is now nearing completion and is a step in the direction of providing all-weather connectivity to remote border areas of Himachal Pradesh and Ladakh which otherwise remained cut off from the rest of the country for about six months during winters.

17**TEJAS EXPRESS ON AHMEDABAD-MUMBAI ROUTE**

- After the successful run of Lucknow-Delhi Tejas Express, the second premium Tejas train is ready to run between Ahmedabad and Mumbai.

Salient features of the train are as under:

- Complimentary Onboard infotainment services will be available in IRCTC trains to the passengers.
- High-quality food and beverages will be provided to the passengers on board in the train and included in the ticket fare.
- Service in the train will be done through trolleys similar to airlines. Each coach will be provided with an RO water filter in addition to the packaged drinking water bottle for each passenger.
- All passengers travelling on IRCTC train will be provided with Rail Travel Insurance of up to Rs. 25 Lakhs, free of cost by IRCTC. This complimentary travel insurance also includes exclusive coverage of Rs. 1 lakh against household theft/robbery during the travel period of the passengers.
- Besides, this special feature, in a first of its own, IRCTC will also pay a compensation of Rs. 100/- in case the train during its run, is delayed by more than one hour and Rs. 250/- in case of delay of more than two hours to every passenger as compensation.
- In case of cancellation of the train, an automatic full refund of full fare on confirmed and /or waitlisted e-tickets will be made. There will be no need of cancelling the ticket or filing TDR in such case
- There will be no tatkal quota or premium tatkal quota in the train. There will be only General Quota and Foreign Tourist Quota. Foreign Tourist Quota of 6 seats in EC and 12 seats in CC will be available for Foreign Tourists.

18**FASTAG**

- FASTags are stickers that are affixed to the windscreen of vehicles and use RFID technology to enable digital, contactless payment of tolls without having to stop at toll gates.
- The tags are linked to bank accounts and other payment methods.
- As a car crosses a toll plaza, the amount is automatically deducted, and a notification is sent to the registered mobile phone number.
- Sensors are placed on toll barriers, and the barriers open for vehicles having valid FASTags.
- A FASTag is valid for five years and needs to be recharged only as per requirement.
- According to the National Highways Authority of India (NHAI), these devices will make passing through tolls considerably smoother since drivers will no longer have to carry cash or stop to make a transaction.
- FASTag enables one to drive through toll squares nonstop.
- There would be no need to stop for cash transaction.
- By employing Radio Frequency Identification (RFID) technology, it makes toll fares payment possible directly from the prepaid accounts linked to it.
- Long queues of vehicles waiting and honking while cumbersome cash exchanges occurring at the counter can be avoided.
- It also helps in reducing fuel wastage and emanating pollution due to long waiting times at the toll plazas.
- A successful implementation of Electronic Toll Collection system on all the major national highways would help save approximately 87,000 crore INR annually.
- Various options like debit card, credit card, NEFT/ RTGS, and even net banking are available for recharging FASTag online.

19 WINGS INDIA 2020

- Indian aviation and technology leaders gathered in Bengaluru for industry meet ahead of "Wings India 2020", Asia's largest civil aviation event.
- Over the last decade, India has witnessed a robust civil aviation market, and through this event we aim to provide a congenial forum that will cater to the rapidly changing dynamics of the sector, focusing on new business acquisition, investments, policy formation and regional connectivity.
- Wings India 2020, a flagship event of the Indian Civil Aviation industry will be held at Begumpet Airport, Hyderabad from 12-15 March 2020. It is organized by the Ministry of Civil Aviation, Govt. of India, AAI and FICCI.
- 'Wings India 2020'- a four-day event themed: "Flying for All" is an international platform focused on the new business acquisition, investments, policy formation and regional connectivity in the civil aviation industry.

20 ROPAX SERVICES

- The government inaugurated ROPAX service from Bhaucha Dhakka, Mumbai to Mandwa, Alibag in Maharashtra.
- ROPAX service is a 'Water Transport Service Project', under Eastern Waterfront Development.
- The benefits of this service include a reduction in the travel time, vehicular emission and traffic on the road.
- The road distance from Mumbai to Mandwa is about 110 kilometres, and gruelling road journey takes three to four hours, whereas by waterway it is about 18 kilometre and journey of just an hour.

12

पिब

AGRICULTURE

1 AGRI-MARKET INFRASTRUCTURE FUND (AMIF)

Context:

- The Cabinet Committee of Economic Affairs gave its approval for the creation of a corpus of Rs. 2000 crore for Agri-Market Infrastructure Fund (AMIF) to be created with NABARD for development and up-gradation of agricultural marketing infrastructure in Gramin Agricultural Markets and Regulated Wholesale Markets.

About:

- AMIF will provide the State/UT Governments subsidized loan for their proposal for developing marketing infrastructure in 585 Agriculture Produce Market Committees (APMCs) and 10,000 Grameen Agricultural Markets (GrAMs).
- States may also access AMIF for innovative integrated market infrastructure projects including Hub and Spoke mode and in Public Private Partnership mode.
- In these GrAMs, physical and basic infrastructure will be strengthened using MGNREGA and other Government Schemes.
- After approval of AMIF Scheme, the interest subsidy will be provided by DAC&FW to NABARD in alignment with annual budget releases during 2018-19 and 2019-20 as well as upto 2024-25.
- The Scheme being demand driven, its progress is subject to the demands from the States and proposals received from them.

2 KISAN URJA SURAKSHA EVAM UTTHAAN MAHABHIYAN (KUSUM)

Context:

- The Ministry of New and Renewable Energy has formulated a Scheme 'Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM)'. The Scheme is currently under the process of seeking approval.

About:

The proposal on KUSUM Scheme provides for :-

- Installation of grid-connected solar power plants each of Capacity up to 2 MW in the rural areas; installation of standalone off-grid solar water pumps to fulfil irrigation needs of farmers not connected to grid; and
- solarisation of existing grid-connected agriculture pumps to make farmers independent of grid supply and also enable them to sell surplus solar power generated to DISCOM and get extra income.

3 PM-KISAN SCHEME

Context:

- The Pradhan Mantri Kisan Samman Nidhi Yojana (PM-KISAN) was announced in the interim Budget 2019-20 on February 1, 2019.

About:

- Under the Scheme, Rs 6,000 will be given per year to small and marginal farmer families having combined land holding/ownership of upto 2 hectares.
- The amount will be given in three instalments of Rs.2000 each.
- The amount will be transferred directly to the bank account of beneficiaries through Direct Benefit Transfer. DBT will ensure transparency in the entire process and will save time for the farmers.
- The Scheme was introduced to augment the income of the Small and Marginal Farmers (SMFs). It is estimated to benefit more than 12 crore small and marginal farmers.
- The PM-KISAN scheme aims to supplement the financial needs of the SMFs in procuring various inputs to ensure proper crop health and appropriate yields, commensurate with the anticipated farm income at the end of the each crop cycle. This would also protect them from falling in the clutches of moneylenders for meeting such expenses and ensure their continuance in the farming activities.
- PM KISAN is a Central Sector scheme with 100% funding from Government of India. The Scheme becomes effective from 1.12.2018 for transfer of benefit to eligible beneficiaries.
- State Government and UT Administration will identify the farmer families which are eligible for support as per scheme guidelines.
- PM KISAN is a revolutionary scheme which aims to transform the lives of small and marginal farmers in India, by providing them assured monetary support in three instalments every year. The scheme implemented through DBT, will transfer the amount directly to the bank account of the beneficiary, thereby eliminating middlemen and corruption. As against the onetime loan waivers, PM KISAN is truly an empowering project designed for ensuring dignified life for small scale farmers. In the long run, the scheme is expected to address farmer migration and improve crop intensity.

Rythu Bandhu scheme

- Farmers' Investment Support Scheme (FISS) is a welfare program to support farmer's investment for two crops a year by the Government of **Telangana**.
- The government is providing 58.33 lakh farmers, Rs. 4000 per acre per season to support the farm investment, twice a year, for rabi and kharif seasons.
- This is a first direct farmer investment support scheme in India, where the cash is paid directly.
- The scheme offers a financial help of Rs. 8,000 per year to each farmer (two crops). There is no cap on the number of acres, and most of the farmers are small and marginal. The total farming land is 1.43 crore acres and the number of farmers in the state stood at 58.33 lakh. Around 55% of population in Telangana make a living from agriculture.

KALIA scheme

- It is a package for farmer's welfare. KALIA stands for "Krushak Assistance for Livelihood and Income Augmentation". This scheme has been launched by **Odisha** Government to accelerate Agricultural Prosperity and reduce poverty in the State.
- Small and marginal farmers, landless Agricultural household, vulnerable Agricultural household, landless Agricultural labourers and sharecroppers (Actual cultivators) all growth is eligible under different components of scheme. Total of 50 lakh families will be covered under the scheme
- Financial assistance of Rs.25,000/- per farm family over five seasons will be provided to small and marginal farmers so that farmers can purchase inputs like seeds, fertilizers, pesticides and use assistance towards labour and other investments. This scheme is implemented from current Rabi Season 2018-19 onwards.

4 AGRICULTURAL PRODUCTION IN THE COUNTRY

- The total food grain production in the country during each of the last three agriculture years (July-June) i.e. from 2015-16 to 2017-18 are given as under:

Year	Production (in million tonnes)
2015-16	251.54
2016-17	275.11
2017-18	285.01

- In order to increase production and productivity of agricultural crops in the country, Government of India is implementing through State Governments, several Crop Development Schemes/Programmes such as National Food Security Mission (NFSM), Rashtriya Krishi Vikas Yojana (RKVY), Bringing Green Revolution to Eastern India (BGREI), National Mission for Sustainable Agriculture (NMSA), Pradhan Mantri Krishi Sinchai Yojana, Soil Health Card etc.
- Under these Schemes / Programmes, funds are provided to States for implementation of State-specific agricultural strategies including incentives to farmers for use of quality seeds, improve soil health under Integrated Nutrient Management (INM), Integrated Pest Management (IPM), farm mechanization, etc. The States are also provided support for creation of agricultural infrastructure for optimal use of water and other natural resources.
- Further, to achieve higher agricultural productivity, Indian Council of Agricultural Research (ICAR) is conducting basic and strategic research relating to crop improvement, production and protection technologies suitable to different situations including development of location-specific varieties/hybrids and technologies.

5 INTEREST FREE LOANS TO FARMERS IN UP

Context:

- Reserve Bank of India (RBI) has issued directions for Relief Measures to be provided by respective lending institutions in areas affected by natural calamities which, inter alia, include, restructuring/rescheduling of existing crop loans and term loans, extending fresh loans, relaxed security and margin norms, moratorium, etc.

About:

- The directions have been so designed that the moment calamity is declared by the concerned District Authorities, they are automatically set in motion without any intervention, thus saving precious time.
- The benchmark for initiating relief measures by banks has also been reduced from 50% to 33% crop loss in line with the National Disaster Management Framework.
- Banks have also been advised not to insist for additional collateral security for restructured loans.

Interest Subvention:

- The Government of India in the Department of Agriculture, Cooperation and Farmers' Welfare (DAC&FW) implements an interest subvention scheme for short term crop loans up to Rs. 3.00 lakh, which provides interest subvention of 2% per annum to Banks on use of their own resources, and, an additional 3% incentive to the farmers for prompt repayment of the loan, thereby reducing the effective rate of interest to 4%.

- Under the aforesaid interest subvention scheme, to provide relief to farmers affected by natural calamities, the interest subvention (2%) on crop loan continues to be available to banks for the first year on the restructured amount.
- Such restructured loans may however, attract normal rate of interest from the second year onwards as per policy laid down by the Reserve Bank of India (RBI).
- In order to provide relief to the farmers affected due to severe natural calamities, the Government in DAC&FW has decided that interest subvention of 2% per annum will be made available to banks for first three years/entire period (subject to a maximum of five years) on the restructured loan amount, and in all such cases the benefit of prompt repayment incentive at 3% per annum shall also be provided to the affected farmers.
- The grant of such benefits in cases of severe natural calamities will be decided by a High Level Committee (HLC) based on the recommendation of Inter-Ministerial Central Team (IMCT) and Sub Committee of National Executive Committee (SC-NEC).

Steps taken by Government:

- The Government of India/ RBI/ National Bank for Agriculture and Rural Development (NABARD) have, inter alia, taken the following major initiatives for providing hassle free crop loans to farmers
- Government fixes agriculture credit disbursement targets for the banking sector every year and banks have consistently surpassed these targets.
- As per RBI directions, Domestic Scheduled Commercial Banks are required to lend 18% of the Adjusted Net Bank Credit (ANBC) or Credit Equivalent to Off-Balance Sheet Exposure (CEOBE), whichever is higher, towards agriculture.
- The Government has introduced the Kisan Credit Card (KCC) Scheme, which enables farmers to purchase agricultural inputs such as seeds, fertilisers, pesticides, etc. and draw cash to satisfy their agricultural and consumption needs. The KCC Scheme has since been simplified and converted into ATM enabled RuPay debit card with, inter alia, facilities of one-time documentation, built-in cost escalation in the limit, any number of drawals within the limit, etc.
- To enhance coverage of small and marginal farmers in the formal credit system, RBI has decided to raise the limit for collateral-free agriculture loans from Rs. 1 lakh to Rs. 1.6 lakh.
- The requirement of 'no due' certificate has also been dispensed with for small loans up to Rs.50,000 to small and marginal farmers, share-croppers and the like and, instead, only a self-declaration from the borrower is required.
- To bring small, marginal, tenant farmers, oral lessees, etc. into the fold of institutional credit, Joint Liability Groups (JLGs) have been promoted by banks.

6

LINKING OF ORGANIC FARMING WITH PROCESSING

Context:

- Government of India has been promoting **traditional farming** in the States through dedicated Schemes, namely, **Mission Organic Value Chain Development North Eastern Region** (MOVCDNER) and **Paramparagat Krishi Vikas Yojana** (PKVY).

About:

- Under these schemes assistance is provided to the farmers for on-farm and off-farm input production/ procurement, creation of post-harvest infrastructure and connecting it through production to processing by the following ways :
 - **Market linkage** of producer clusters with some major agri-business, phytochemical and online grocery stores have been established under MOVCDNER.

- Providing incentives for **infrastructure creation**, storage, grading, packaging, branding, publicity, transportation, value addition, development of integrated value chain and organic fairs.
- Promoting **formation** of Farmer Producers Companies (FPCs)/ Organizations (FPOs)/ Clusters, thereby assisting member farmers to receive remunerative prices for their organic produce due to improved economies of scale, value addition and access to market for their organic produce.
- Government has launched a **www.jaivikkheti.in portal** acting both as a knowledge as well as marketing platform. Details of farmers involved in Organic farming input suppliers, certification agencies (PGS) and marketing agencies are available for smooth implementation from production to marketing.
- PKVY/PGS groups can take the advantage of this portal for capacity building, technical know-how, communicating with marketing channels/ other groups and direct marketing of their produce to prospective buyers and consumers.

7

KISAN CREDIT CARD (KCC)

Context:

- KCC Scheme has been extended to fisheries and animal husbandry by **Ministry of State for Fisheries, Animal Husbandry and Dairying**

About:

- The extension of KCC will include both inland and marine fisheries to meet the short term credit requirements of rearing of animals, birds, fish, shrimp, other aquatic organisms, capture of fish'.
- Banks have been instructed to extend credit facilities to individual fishermen, fishermen groups, self-help groups and women self-help groups engaged in inland and marine fisheries.
- It will prevent fishermen from taking loans from local moneylenders at exorbitant interest rates
- The District-Level Technical Committee would fix the scale of finance and the banks would fix the repayment period.

KCC Scheme:

- To fulfil the financial requirements of the farmers at various stages of farming through institutional credit, it was prepared by **National Bank for Agriculture and Rural Development (NABARD)** on the recommendation of **R.V. Gupta committee** in 1998-99.
- Small and Marginal farmers, share croppers, lessee and tenant farmers and self-help groups (SHGs) or Joint Liability Groups (JLGs) are eligible to get the benefits of the KCC Scheme.
- KCC is valid for 5 years subject to annual review and performance of the borrower.

Objectives of KCC Scheme:

- To provide institutional credit to the farmers at the cheap rate of interest
- To provide credit at the time of requirement
- To support Post-harvest expenses
- Working capital for maintenance of farm assets and activities allied to agriculture
- Investment credit requirement for agriculture and allied activities (land development, pump sets, plantation, drip irrigation etc.)
- Consumption requirements of farmers

Who implemented this scheme?

- It is being implemented by the all Co-operative banks, Regional Rural Banks and public sector banks throughout the country. NABARD monitors the scheme in terms of the Cooperative Banks & RRBs and RBI in respect of Commercial Banks.
- A new feature is started in the KCC scheme by the RBI and NABARD which provides ATM card to farmers which can be used at all ATMs and point of sale terminals.

8

20TH LIVESTOCK CENSUS REPORT

Context:

- Department of Animal Husbandry & Dairying releases 20th Livestock Census; Total Livestock population increases 4.6% over Census-2012, Increases to 535.78 million

About:

- The total Livestock population is 535.78 million in the country showing an increase of 4.6% over Livestock Census-2012
- Total Bovine population (Cattle, Buffalo, Mithun and Yak) is 302.79 Million in 2019 which shows an increase of about 1% over the previous census.
- The total number of cattle in the country in 2019 is 192.49 million showing an increase of 0.8 % over previous Census.
- The Female Cattle (Cows population) is 145.12 million, increased by 18.0% over the previous census (2012).
- The Exotic/Crossbred and Indigenous/Non-descript Cattle population in the country is 50.42 million and 142.11 million respectively.
- The Indigenous/Non-descript female cattle population has increased by 10% in 2019 as compared to previous census.
- The population of the total Exotic/Crossbred Cattle has increased by 26.9 % in 2019 as compared to previous census.
- There is a decline of 6 % in the total Indigenous/ Non-descript cattle population over the previous census. However, the pace of decline of Indigenous/ Non-descript cattle population during 2012-2019 is much lesser than as compared to the 2007-12 which was about 9%.
- The total buffaloes in the country are 109.85 million showing an increase of about 1.0% over previous Census.
- The total milch animals (in-milk and dry) in cows and buffaloes are 125.34 million, an increase of 6.0 % over the previous census.
- The total sheep in the country is 74.26 million in 2019, increased by 14.1% over previous Census.
- The Goat population in the country in 2019 is 148.88 million showing an increase of 10.1% over the previous census.
- The total Pigs in the country is 9.06 Million in the current Census, declined by 12.03% over the previous Census.
- The other livestock including mithun, yak, horses, ponies, mule, and donkeys, camel together contribute around 0.23% of the total livestock and their total count is 1.24 million.
- The total poultry in the country is 851.81 million in 2019, registered an increase of 16.8% in the total poultry.
- The total birds in the backyard poultry in the country is 317.07 million. The backyard poultry has increased by around 46% as compared to previous Census.

- The total Commercial Poultry in the country is 534.74 million in 2019, increased by 4.5% over previous Census.

9 ZERO BUDGET NATURAL FARMING

- It is a method of **chemical-free agriculture** drawing from traditional Indian practices.
- Using cow dung, urine based formulations and botanical extracts would help farmers in reducing the input cost.
- **Intercropping with leguminous crops** is one of the components of ZBNF and it improves the crop productivity and soil fertility by way of fixing the atmospheric nitrogen.
- It promotes soil aeration, minimal watering, intercropping, bunds and topsoil mulching and discourages intensive irrigation and deep ploughing.
- It was developed by Subhash Palekar from Maharashtra in the mid-1990s as an alternative to the Green Revolution's methods, which led to indebtedness and suicide among farmers due to rising cost on external inputs in agriculture.
- During this revolution, impact of chemicals on the environment and on long-term fertility was also very devastating.
- ZBNF would break the debt cycle for many small farmers.

Components of ZBNF:

- **Jeevamrutha:** It is a fermented **microbial culture** that uses urine and dung from an indigenous cow breed and paste of green gram to rejuvenate the soil to **provide micro-nutrients to crops**.
- **Bijamrita:** It is a treatment used for seeds, seedlings or any planting material.
- **Acchadana:** It promotes mulching and soil aeration for favourable soil conditions.
- **Whapasa:** It provides moisture to the soil.

10 ASSISTANCE TO FEMALE FARMERS

- The Department of Rural Development, Ministry of Rural Development is implementing Mahila Kisan Sashaktikaran Pariyojana (MKSP) to empower women in agriculture by making systematic investments to enhance their participation and productivity, as also to create and sustain their agriculture-based livelihoods.
- Under MKSP, a total number of 36.06 lakh Mahila Kisans have been benefitted through 84 projects in 24 States/UTs in the country, out of which 1.81 lakhs women have been benefitted in the State of Maharashtra. A total Central allocation of Rs.847.48 crore has been made towards implementation of the approved projects, out of which an amount of Rs. 52.15 crore has been allocated for projects in Maharashtra State.
- The Department of Agriculture Cooperation and Farmers Welfare is also providing additional support and assistance to female farmers, over and above the male farmers under various Schemes namely Agri-Clinic & Agri-Business Centre (ACABC), Integrated Schemes of Agricultural Marketing (ISAM), Sub-Mission of Agricultural Mechanization (SMAM) and National Food Security Mission (NFSM).
- Besides, female farmers can also avail the benefits under all the schemes implemented by the Department as per eligibility.

11**AADHAAR ENABLED FERTILIZER DISTRIBUTION SYSTEM**

- During the year 2016-17, Direct Benefit Transfer (DBT) system of fertilizer subsidy was introduced on pilot basis in 19 districts. Further, DBT system was rolled out in a phase wise manner across all States and Union Territories from September 2017 to March 2018.
- Under the fertilizer DBT system, 100% subsidy on various fertilizer grades is released to the fertilizer companies, on the basis of actual sales made by the retailers to the beneficiaries. Sale of all subsidised fertilizers to farmers/buyers is made through Point of Sale (PoS) devices installed at each retailer shop and the beneficiaries are identified through Aadhaar Card, KCC, Voter Identity Card etc.
- Under Aadhaar enabled Fertilizers Distribution System (AeFDS), it is mandatory for the retailers to sell subsidized fertilizers through PoS devices. The Fertilizer sales are monitored online through web based Integrated Fertilizer Management System (iFMS). A study conducted by NITI Aayog through M/s Microsave revealed that AeFDS has increased accountability of stakeholders including fertilizer manufacturers, wholesalers and retailers.
- The NITI Aayog study in the pilot districts revealed that diversion of fertilizers has reduced. However, the extent of diversion of fertilizers for non-agriculture activities has not been quantified.
- To address the peak season demand, the Agriculture Departments in all States/Union Territories have been advised to identify retail points where large rush of farmers is expected during peak season. State Governments have been advised to operationalize multiple sale counters with multiple PoS devices at such retail outlets so that large rush at such points can be dealt with in a smooth manner without causing any inconvenience to the farmers and retailers.

12**TRANSPORT OF FERTILIZER**

- Department of Fertilizers (DoF) has developed an IT enabled system viz., Integrated Fertilizer Management System (iFMS), which captures end to end details of Fertilizer in terms of Production, Movement, availability, requirement, Sale, Subsidy Bill Generation to Subsidy payment to fertilizer companies. Few features of iFMS portal are as below:
 - Real time, online tracking of fertilizer movement, along the plant/port-rake point-district-wholesaler-retailer chain.
 - Real time Fertilizer availability data at state, district, wholesaler & retailer level.
 - Real time tracking of sale of fertilizers at subsidized rates to farmers through PoS devices.
 - A complete end to end transaction visibility of fertilizers starting from import/ production till sales to farmers.
- Department has also developed a dashboard which can be accessed at <https://urvarak.nic.in>. The dashboard is developed to facilitate easy monitoring by various Stake holders viz. State Agriculture Departments, District Collectors and State Marketing Federations. The Dashboards provide various reports viz.,
 - Top 20 buyers (State wise, District wise)
 - Frequent buyers (State wise, District wise)
 - the retailers not selling fertilizer through PoS devices
 - Stock as on Today
 - Stock Availability: at port, plant, in states, product and period-wise (month, year etc.)
- The State Governments are also monitoring the availability and supply of fertilizers through iFMS and e-Urvarak Dashboard portals.

13

DATA BANK OF FARMERS

- The Department of Agriculture, Cooperation and Farmers Welfare has constituted a Task Force to develop a comprehensive Farmers' Database for better planning, monitoring, strategy formulation and smooth implementation of schemes for the entire country.
- This Centralised Farmers Database shall be useful for various activities like issuing soil health cards, dissemination of crop advisories to the farmers, precision farming, smart cards for farmers to facilitate e-governance, crop insurance, settlement of compensation claims, grant of agricultural subsidies, community/village resource centres etc.

13



**GEOGRAPHY
& ENVIRONMENT**

1

NATIONAL CLEAN AIR PROGRAMME (NCAP)

Context:

- A time bound national level strategy for pan India implementation to tackle the increasing air pollution problem across the country in a comprehensive manner in the form of National Clean Air Programme (NCAP) was launched by Union Minister of Environment, Forest and Climate Change, in New Delhi.

About:

- Taking into account the available international experiences and national studies, the tentative national level target of 20%–30% reduction of PM_{2.5} and PM₁₀ concentration by 2024 is proposed under the NCAP taking 2017 as the base year for the comparison of concentration.
- Overall objective of the NCAP is comprehensive mitigation actions for prevention, control and abatement of air pollution besides augmenting the air quality monitoring network across the country and strengthening the awareness and capacity building activities
- The approach for NCAP includes collaborative, multi-scale and cross-sectoral coordination between the relevant central ministries, state governments and local bodies. Dovetailing of the existing policies and programmes including the National Action Plan on Climate Change (NAPCC) and other initiatives of Government of India in reference to climate change will be done while execution of NCAP.
- There will be use of the Smart Cities program to launch the NCAP in the 43 smart cities falling in the list of the 102 non-attainment cities.
- The NCAP is envisaged to be dynamic and will continue to evolve based on the additional scientific and technical information as they emerge.
- The NCAP will be institutionalized by respective ministries and will be organized through inter-sectoral groups.
- The program will partner with multilateral and bilateral international organizations, and philanthropic foundations and leading technical institutions to achieve its outcomes.
- City specific action plans are being formulated for 102 non-attainment cities identified for implementing mitigation actions under NCAP. Cities have already prepared action plans in consultation with CPCB. Institutional Framework at Centre and State Level comprising of Apex Committee at the Ministry of Environment Forest and Climate Change in the Centre and at Chief Secretary Level in the States are to be constituted.
- In addition, sectoral working groups, national level Project Monitoring Unit, Project Implementation Unit, state level project monitoring unit, city level review committee under the Municipal Commissioner and DM level Committee in the Districts are to be constituted under NCAP for effective implementation and success of the Programme.
- Other features of NCAP include, increasing number of monitoring stations in the country including rural monitoring stations, technology support, emphasis on awareness and capacity building initiatives, setting up of certification agencies for monitoring equipment, source apportionment studies, emphasis on enforcement, specific sectoral interventions etc.

2

MEASURES TO POPULARISE ROOF TOP SOLAR POWER SYSTEM

Context:

- Under the present rooftop solar programme (2015), an aggregated capacity of 2100 MW is targeted to be achieved in residential, institutional, social and Government sector through central financial assistance by the year 2019-20.
- For this, Government is taking a number of steps to promote rooftop solar in the country.

CLEARING THE AIR

AIM OF NATIONAL CLEAN AIR PROGRAMME

To meet prescribed annual average ambient air quality standards at all locations in the country

How it will work

A NEW INSTITUTIONAL FRAMEWORK FINALISED

Apex committee
under environment
minister

Steering committee
under secy
(environment)

CPCB TO STEER
identification of
alternative tech
for ambient air
quality monitoring

50
stations in rural
areas to monitor
air quality

PM 2.5
to be monitored
across the
country

Monitoring committee under joint secretary

**National project
implementation
unit at CPCB**
(5-6 scientific
personnel)

**State-level
project
monitoring units**
(3-4 scientific
personnel)

National project monitoring unit in
environment min (25 scientific personnel)

**Air quality
management
plan would be
proposed for**
100 cities

**Guidelines to
be worked out
for indoor air
pollution**

**Authority to
be set up to
manage 3-tier
system for
data collection,
archiving &
analytics**

**EXTENSIVE
PLANTATION
DRIVE**

Air Information Centre to be set
up for data analysis, interpretation
& policy updates

**Source apportionment
studies (to identify
sources of pollution &
contribution) to be
commissioned in**
94 cities

**Increase in
manual
monitoring
stations
from**
691
to
1,000

About:

- As per data captured on the SPIN portal of the Ministry of New and Renewable Energy (MNRE), a total of 1279 MW capacity grid connected rooftop solar PV systems have been reported installed in the country as on 31.1.2019.

Steps to promote rooftop solar in the country:

- Providing central financial assistance (CFA) for residential/institutional/social sectors and achievement linked incentives for Government sectors through Rooftop Solar Scheme.
- Persuading states to notify the net/gross metering regulations for Real Time Strategy (RTS) projects. Now all the 36 States/UTs/SERCs have notified such regulations and/or tariff orders.
- Prepared model MoU, PPA and Capex Agreement for expeditious implementation of RTS projects in Governmentt Sector.
- Allocate Ministry-wise expert PSUs for handholding and support in implementation of RTS projects in various Ministries/Departments.
- Suryamitra program is being implemented for creation of a qualified technical workforce.
- Initiated DG S&D rate contract for solar rooftop systems.
- Creation of SPIN-an online platform for expediting project approval, report submission and monitoring progress of implementation of RTS projects.
- Initiated Geo-tagging of RTS project, in co-ordination with ISRO, for traceability and transparency.
- Facilitated availability of concessional loans from World Bank and Asian Development Bank (ADB) to SBI and PNB respectively, for disbursal of loans to industrial and commercial sectors, where CFA/incentive is not being provided by the Ministry.

National Solar Mission:

It is an initiative of the Government of India and State Governments to promote solar power. The mission is one of the several initiatives that are part of the National Action Plan on Climate Change. The program was inaugurated in January 2010 with a target of 20GW by 2022 which was later increased to 100 GW. India increased its solar power generation capacity by nearly 5 times from 2,650 MW on 26 May 2014 to 12,288.83 MW on 31 March 2017.

3

HAZARDOUS WASTE (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016

Context:

- In order to strengthen the implementation of environmentally sound management of hazardous waste in the country, the Ministry of Environment, Forest and Climate Change amended the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

About:

- The amendment has been done keeping into consideration the "Ease of Doing Business" and boosting "Make in India" initiative by simplifying the procedures under the Rules, while at the same time upholding the principles of sustainable development and ensuring minimal impact on the environment.
- Some of the salient features of the Hazardous and Other Wastes (Management & Transboundary Movement) Amendment Rules, 2019 are as follows:

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

4

INDIA COOLING ACTION PLAN (ICAP)**Context:**

- Union Minister for Environment, Forest and Climate Change launched the India Cooling Action Plan (ICAP) in New Delhi.

About:

- India is one of the first countries in the world to develop a comprehensive Cooling Action plan which has a long term vision to address the cooling requirement across sectors and lists out actions which can help reduce the cooling demand.
- Cooling requirement is cross sectoral and an essential part for economic growth and is required across different sectors of the economy such as residential and commercial buildings, cold-chain, refrigeration, transport and industries.
- The thrust of the India Cooling Action Plan (ICAP) is to look for synergies in actions for securing both environmental and socio-economic benefits.

The India Cooling Action seeks to:

- reduce cooling demand across sectors by 20% to 25% by 2037-38,
- reduce refrigerant demand by 25% to 30% by 2037-38,
- Reduce cooling energy requirements by 25% to 40% by 2037-38,
- Recognize "cooling and related areas" as a thrust area of research under national S&T Programme,
- Training and certification of 100,000 servicing sector technicians by 2022-23, synergizing with Skill India Mission.

The following benefits would accrue to the society over and above the environmental benefits:

- Thermal comfort for all – provision for cooling for EWS and LIG housing,
- Sustainable cooling – low GHG emissions related to cooling,
- Doubling Farmers Income – better cold chain infrastructure – better value of produce to farmers, less wastage of produce,

- Skilled workforce for better livelihoods and environmental protection,
- Make in India – domestic manufacturing of air-conditioning and related cooling equipment's,
- Robust R&D on alternative cooling technologies – to provide push to innovation in cooling sector.

5

SINGLE-USE PLASTICS AND SUSTAINABLE NITROGEN MANAGEMENT

Context:

- In a significant first, India piloted resolutions on two important global environment issues relating to Single-use Plastics and Sustainable Nitrogen management at the fourth session of United Nations Environment Assembly (UNEA) which was held in Nairobi from 11th to 15th March 2019.

About:

- UNEA adopted both the resolutions with consensus. The theme of the UNEA this year was Innovative Solutions for environmental challenges and sustainable production and consumption.
- The global nitrogen use efficiency is low, resulting in pollution by reactive nitrogen which threatens human health, eco system services, contributes to climate change and stratospheric ozone depletion.
- Only a small proportion of the plastics produced globally are recycled with most of it damaging the environment and aquatic bio-diversity.
- Both these are global challenges and the resolutions piloted by India at the UNEA are vital first steps towards addressing these issues and attracting focus of the global community.

Nitrogen pollution- impact on the environment:

- It creates harmful algal blooms and dead zones in our waterways and oceans; the algae produce toxins which are harmful to human and aquatic organisms (and indirectly affects fisheries and biodiversity in coastal areas).
- Contamination of drinking water: 10 million people in Europe are potentially exposed to drinking water with nitrate concentrations above recommended levels. This can have an adverse effect on human health.
- Food Security: Excessive nitrogen fertiliser application contributes to soil nutrient depletion. As the world needs to feed an ever growing population, loss of arable land is major global problem.
- The release of Nitrous Oxide is essentially a greenhouse gas which is harmful to the environment.

6

FAME II SCHEME

Context:

- The NITI Aayog and the Rocky Mountain Institute (RMI) released a report on opportunities for the automobile sector and government under the Faster Adoption and Manufacturing of Electric Vehicles II (FAME II) scheme.

About:

- The technical report titled 'India's Electric Mobility Transformation: Progress to Date and Future Opportunities', quantifies the direct oil and carbon savings that the vehicles incentivized under FAME II will deliver. RMI is an Indian and global nonprofit organisation focused on driving the efficient and restorative use of resources.

- The report also quantifies the catalytic effect that FAME II and other measures could have on the overall Electric Vehicle (EV) market.
- The FAME II scheme, which was notified by the Union Cabinet in February 2019, aims to further accelerate the government of India's commitment to a clean mobility future, sees the electrification of transportation as a primary focus area. FAME II intends to catalyze the market for faster adoption of EVs to ensure durable economic growth and global competitiveness for India's automotive industry.

Key highlights from the report:

- Effects of FAME II will go beyond the vehicles that are eligible under the FAME II.
- There is considerable energy and CO₂ savings associated with the two, three, and four-wheeled vehicles and buses covered by FAME II over their lifetime, as well as the potential savings associated with greater adoption levels by 2030
- The electric buses covered under FAME II will account for 3.8 billion vehicle kilometers travelled (e-vkt) over their lifetime
- In order to capture the potential opportunity in 2030, batteries must remain a key focal point as they will continue to be the key cost driver of EVs.
- Vehicles eligible under FAME II scheme can cumulatively save 5.4 million tonnes of oil equivalent over their lifetime worth Rs 17.2 thousand crores.
- EVs sold through 2030 could cumulatively save 474 million tonnes of oil equivalent (Mtoe) worth INR 15 lakh crore and generate net CO₂ savings of 846 million tonnes over their operational lifetime.
- India needs auto industry's active participation to ease electric mobility transition. The auto and battery industries could collaborate to enhance customer awareness, promote domestic manufacturing, promote new business models, conduct R&D for EVs and components, consider new business models to promote EVs
- Government should focus on a phased manufacturing plan to promote EVs, provide fiscal and non-fiscal incentives for phased manufacturing of EVs and batteries. Different government departments can consider a bouquet of potential policies, such as congestion pricing, ZEV credits, low emission/exclusion zones, parking policies, etc. to drive adoption of EVs.

7

COP MEETINGS OF BASEL, ROTTERDAM AND STOCKHOLM CONVENTIONS

Context:

- The joint meetings of three conventions on chemicals and waste that is the fourteenth meeting of the Conference of the Parties (COP) to **Basel Convention** on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (COP 14) was held along with the ninth meeting of the COP to **Rotterdam Convention** on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the ninth meeting of the COP to **Stockholm Convention** on Persistent Organic Pollutants.
- The theme of the meetings this year was "**Clean Planet, Healthy People: Sound Management of Chemicals and Waste**".

About:

- In Basel Convention, two important issues were discussed and decided, i.e. technical guidelines on e-waste and inclusion of plastic waste in the PIC procedure.

- The draft technical guidelines stipulated the conditions when used electrical and electronic equipment destined for direct reuse, repair, refurbishment or failure analysis should be considered as non-waste.
- India had major reservations regarding these provisions as in the name of re-use, repair, refurbishment and failure analysis there was a possibility of dumping from the developed world to the developing countries including India in view of the growing consumption of electronic equipment and waste across the world.
- The Indian delegation strongly objected the proposed decision on these guidelines during plenary and did not allow it to be passed by the conference of the parties (COP).
- On the final day of the COP, a modified decision was adopted in which all the concerns raised by India were incorporated. These were: dumping of e-waste in developing countries;
- recognition that the interim guideline has issues and further work is required specially on the provision on distinguishing waste from non-waste; the guidelines were adopted on an interim basis only; the tenure of the expert working group was extended to address the concerns raised by India; and the usage of interim guidelines to be done only on a pilot basis.
- Under the Basel Convention, another major achievement of COP 14 was the decision to amend the convention to include unsorted, mixed and contaminated plastic waste under PIC (Prior Informed Consent) procedure and improve the regulation of its transboundary movement. This is a significant step taken towards addressing plastic pollution which has become a major environmental concern across the globe.
- Further, Basel Convention has also adopted partnership on plastic which was welcomed by the Indian delegation. These steps will help prevent the illegal dumping of plastic wastes in developing countries.
- Under the Stockholm Convention the COP decided to list "Dicofol" in Annex A without any exemption. The Perfluorooctanoic Acid (PFOA) was also listed with some exemptions in the Annex A of the Stockholm Convention.
- Under the Rotterdam Convention, two new chemicals (Phorate and HBCD) were added in the list for mandatory PIC procedure in international trade.

The Rotterdam Convention

- ▶ The Rotterdam Convention is a multilateral treaty to promote shared responsibilities in relation to importation of hazardous chemicals.
- ▶ The convention promotes open exchange of information and calls on exporters of hazardous chemicals to use proper labeling, include directions on safe handling, and inform purchasers of any known restrictions or bans.
- ▶ Signatory nations can decide whether to allow or ban the importation of chemicals listed in the treaty, and exporting countries are obliged to make sure that producers within their jurisdiction comply.

Basel Convention

- ▶ The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, usually known as the Basel Convention, is an international treaty that was designed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less developed countries (LDCs). It does not, however, address the movement of radioactive waste.

Stockholm Convention

- ▶ Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, signed in 2001 and effective from May 2004, that aims to eliminate or restrict the production and use of persistent organic pollutants (POPs).

8

RUDRAKSH PLANTATION IN GANGA BASIN

Context:

- A Memorandum of Understanding (MoU) was signed between National Mission for Clean Ganga, HCL Foundation and INTACH for taking up a project of 'Plantation of Rudraksh Trees in Uttarakhand' as a part of CSR initiative under the 'Namami Gange' Programme.

About:

- While the project aims at planting 10,000 Rudraksh trees in the catchment area of river Ganga in Uttarakhand in association with local community and other stakeholders, it will also help in generating income for people residing in those areas.
- Namami Gange Mission aims at providing comprehensive and sustainable solutions for a cleaner ecosystem along the stretch of 97 towns and 4,465 villages on the Ganga stem and a public-private partnership will provide the initiative a much-needed impetus.

Rudraksha (Elaeocarpus Ganitrus):

- ▶ Rudraksha is a Sanskrit compound consisting of the name Rudra ("Shiva") and aksha ("Tear Drops").
- ▶ Elaeocarpus ganitrus, is a large evergreen broad-leaved tree whose seed is traditionally used for prayer beads in Hinduism and Buddhism. The seeds are known as rudraksha, or rudraksh, Sanskrit: rudrākṣa ("Rudra's Tear Drops").
- ▶ Rudraksha may be produced by several species of Elaeocarpus; however, E. ganitrus is the principal species used in the making of organic jewellery or mala.
- ▶ Elaeocarpus ganitrus grows in the area from the Gangetic plain in the foothills of the Himalayas to South-East Asia, Nepal, Indonesia, New Guinea to Australia, Guam, and Hawaii.
- ▶ Rudraksha seeds are covered by an outer husk of blue colour when fully ripe, and for this reason are also known as blueberry beads. The blue colour is not derived from pigment but is structural.
- ▶ It is an evergreen tree that grows quickly. The rudraksha tree starts bearing fruit in three to four years. As the tree matures, the roots buttress rising up narrowly near the trunk and radiating out along the surface of the ground.

9

INDIGENOUS BIO-JET FUEL

Context:

- IAF's formidable workhorse, the Russian made **AN-32 aircraft** was formally fleet certified to fly on blended aviation fuel containing up to 10% of **indigenous bio-jet fuel**.

About:

- The IAF has undertaken a series of evaluation tests and trials with this green aviation fuel for the last one year. The scope of these checks was in consonance with the international aviation standards.
- This approval is an acknowledgement of the meticulous testing using the indigenous bio-jet fuel by the IAF.
- The indigenous bio-jet fuel was first produced by the **CSIR-IIP** lab at Dehradun in 2013, but could not be tested or certified for commercial use on aircraft due to lack of test facilities in the civil aviation sector.
- IAF's flight test crew and engineers have been evaluating the performance of this fuel against international standards.

- This is a huge step in promoting the 'Make in India' mission as this bio-fuel would be produced from **Tree Borne Oils (TBOs)** sourced from tribal areas and farmers, augmenting their income substantially.

BIO JET FUEL:

- ▶ Bio jet fuel is greenhouse gas (GHG) neutral, carbon neutral, reduces air pollution. Capping its blending with aviation turbine fuel will help to bring down import bill on crude oil. Moreover, commercialization of aviation biofuel promises large-scale employment avenues both in formal and informal sector,
- ▶ The use of bio jet fuel will help in reducing greenhouse gas (GHG) emissions by about 15% and sulfur oxides (SOx) emissions by over 99%. It is expected to provide indigenous jet fuel supply security. Its usage also offers superior engine performance and reduced maintenance cost for the airline operators.

10 SELFIE WITH SAPLING CAMPAIGN

Context:

- On the eve of World environment Day, Union Environment Minister launched #selfiewithsapling campaign.

About:

- It is a people's campaign urging all to join and plant a sapling and post the selfie with the sapling on social media. 'Jan Bhagidari' (people's participation) is integral towards tackling the environmental issues and environment protection has to be a people's movement.
- **Significance:** Such initiatives are needed so as to create a carbon sink. Also environmental concerns cannot be addressed solely by government and has to be a people's programme.
- **Other Initiatives**
 - **Hawa Aane De:** Recently, the Environment ministry released a music video for World Environment Day 2019's theme of "Air Pollution", song is titled "Hawa Aane De".
 - **NCAP:** National Clean Air Programme (NCAP) was launched in January 2019, by Centre government with aim to reduce air pollution by 2024. According to environment ministry, the committee formed under NCAP has drawn up an action plan for 84 of 102 non-attainment cities, i.e. cities that do not meet the National Air Quality Standard (NAQS) identified under programme.

Some Air Pollution Facts:

- 92 percent of people worldwide do not breathe clean air.
- Air pollution costs the global economy \$5 trillion every year in welfare costs.
- Ground-level ozone pollution is expected to reduce staple crop yields by 26 percent by 2030.

11 NATIONAL POLICY ON BIO-FUEL

About:

- The National Policy on Biofuels-2018 allows production of ethanol from damaged food grains like wheat, broken rice etc. which are unfit for human consumption. The policy also allows conversion of surplus quantities of food grains to ethanol, based on the approval of National Biofuel Coordination Committee.

Salient Features:

- The Policy categorises biofuels as “Basic Biofuels” viz. First Generation (1G) bioethanol & biodiesel and “Advanced Biofuels” - Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels, Third Generation (3G) biofuels, bio-CNG etc. to enable extension of appropriate financial and fiscal incentives under each category.
- The Policy expands the scope of raw material for ethanol production by allowing use of Sugarcane Juice, Sugar containing materials like Sugar Beet, Sweet Sorghum, Starch containing materials like Corn, Cassava, Damaged food grains like wheat, broken rice, Rotten Potatoes, unfit for human consumption for ethanol production.
- Farmers are at a risk of not getting appropriate price for their produce during the surplus production phase. Taking this into account, the Policy allows use of surplus food grains for production of ethanol for blending with petrol with the approval of National Biofuel Coordination Committee.
- With a thrust on Advanced Biofuels, the Policy indicates a viability gap funding scheme for 2G ethanol Bio refineries of Rs.5000 crore in 6 years in addition to additional tax incentives, higher purchase price as compared to 1G biofuels.
- The Policy encourages setting up of supply chain mechanisms for biodiesel production from non-edible oilseeds, Used Cooking Oil, short gestation crops.
- Roles and responsibilities of all the concerned Ministries/Departments with respect to biofuels has been captured in the Policy document to synergise efforts.

Targets:

- The National Policy on Biofuels-2018 approved by the Government envisages an indicative target of 20% blending of ethanol in petrol and 5% blending of bio-diesel in diesel by 2030.
- The policy has widened the scope of raw material for ethanol procurement.
- Under EBP programme, ethanol blending in petrol is being undertaken by the Oil Marketing Companies (OMCs) in whole country except island Union Territory (UT) of Andaman Nicobar and Lakshadweep wherein, OMCs blend up to 10 % ethanol in petrol under the EBP Programme.

Steps taken by Government in this regard:

- Government has approved Pradhan Mantri JI-VAN Yojana to provide Viability Gap Funding (VGF) to Second Generation bio-ethanol manufacturing projects to increase availability of ethanol for EBP programme.
- Government has decided to leapfrog directly to BS-VI quality w.e.f. 1st April, 2020 in the entire country.
- Considering the rise in environmental pollution in National Capital Region, Government has started supply of BS-VI auto fuel in National Capital Territory of Delhi from 1st April, 2018.
- Further, in line with the directions issued by Ministry of Petroleum and Natural Gas, supply of BS-VI auto fuel has started in ten districts of National Capital Region and three other districts/cities outside of National Capital Region (Karauli, Dhaulpur and city of Agra) w.e.f. 1st April, 2019.

12**ARMY LAUNCHES E CAR TO COMBAT POLLUTION****Context:**

- The Indian Army in step with government policies on environmental protection has launched an ecological initiative with employing E Cars for use of its officials in New Delhi in partnership with Energy Efficiency Services Ltd (EESL), a joint Venture of Central PSUs under Ministry of Power.

About:

- The introduction of E-Car in Army at Delhi was visualized on World Environment Day and launched on 01 Aug 2019 with flagging off the first lot of E-Cars for Indian Army
- Army plans to operate the first batch of 10 E-Cars as a pilot project and develop further on this initiative and increase the number of E Cars in Delhi to ensure economy, efficiency and minimal emissions.
- It is pertinent to mention that Army has always been at the forefront of environmental initiatives.
- Indian Army has a large number of Territorial Army Battalions (ECO) which has done a yeoman service in environmental protection initiatives such as forestation.
- Army units posted in remote and ecologically sensitive areas from Kashmir to Kanya Kumari have been carrying out various activities in close coordination with local populace to conserve the ecological balance and protect the environment.
- Air pollution has been a major challenge in Delhi. Governments across the World are investing a lot of resources in fighting this menace. Electric vehicle technology has proved to be a viable alternative by reducing the carbon emission footprint.
- Army's initiative in encouraging these electric vehicles will go a long way in further development of this technology and its adoption for the general public in near future.

13

KABIL

Context:

- A joint venture company namely Khanij Bidesh India Ltd. (KABIL) is to be set up with the participation of three Central Public Sector Enterprises namely, National Aluminum Company Ltd.(NALCO), Hindustan Copper Ltd.(HCL) and Mineral Exploration Company Ltd. (MECL).

About:

- KABIL is to ensure a consistent supply of critical and strategic minerals to Indian domestic market.
- While KABIL would ensure mineral security of the Nation, it would also help in realizing the overall objective of import substitution
- The sustained source of mineral and metal commodities is imperative for the transportation and manufacturing segment.
- Further segments like Aviation, Defence and Space Research also require minerals with lower weight and high mechanical strength. Among such twelve minerals identified as strategic minerals, which have meagre resource base, Lithium Cobalt are significant
- The KABIL would carry out identification, acquisition, exploration, development, mining and processing of strategic minerals overseas for commercial use and meeting country's requirement of these minerals.
- The sourcing of these minerals or metals is to be done by creating trading opportunities, G2G collaborations with the producing countries or strategic acquisitions or investments in the exploration and mining assets of these minerals in the source countries.
- The new company will help in building partnerships with other mineral rich countries like Australia and those in Africa and South America, where Indian expertise in exploration and mineral processing will be mutually beneficial bringing about new economic opportunities.

14

UNIDO AND NATIONAL INSTITUTE OF SOLAR ENERGY TO PARTNER FOR SKILL DEVELOPMENT PROGRAM

Context:

- An agreement was signed today between the National Institute of Solar Energy (NISE) and the United Nations Industrial Development Organization (UNIDO) to initiate a skill development programme for different levels of beneficiaries in the solar thermal energy sector.

About:

- NISE and UNIDO will engage national and international experts to bring the best practices by developing specialized training material.
- The agreement is part of the ongoing MNRE-GEF-UNIDO project implemented jointly by UNIDO and to support capacity building and skill development of technical manpower in the Concentrated Solar Thermal Energy Technologies (CST) which are being used to replace conventional fossil fuels e.g. coal, diesel, furnace oil etc. and save costs and emissions in the industrial process heat applications.

15

SARAL

Context:

- Ministry for Power and New & Renewable Energy launches SARAL – 'State Rooftop Solar Attractiveness Index'.

About:

- Union Minister of State for Power and New & Renewable Energy and Skill Development & Entrepreneurship, launched the State Rooftop Solar Attractiveness Index–SARAL.
- **The State of Karnataka gets first rank in the Index.** Telangana, Gujarat and Andhra Pradesh have got 2nd, 3rd and 4th rank respectively.
- The Index evaluates Indian states based on their attractiveness for rooftop development.
- SARAL has been designed collaboratively by the Ministry of New and Renewable Energy (MNRE), Shakti Sustainable Energy Foundation (SSEF), Associated Chambers of Commerce and Industry of India (ASSOCHAM) and Ernst & Young (EY).
- SARAL currently captures five key aspects –
 - robustness of policy framework
 - implementation environment
 - investment climate
 - consumer experience
 - business ecosystem
- It encourages each state to assess the initiatives taken so far, and what it can do to improve its solar rooftop ecosystem. This will help states to channelize investments that can eventually help the sector grow.
- The Ministry of New and Renewable Energy (MNRE) has set a target of 175 GW of renewable energy capacity by 2022, of which 100 GW solar power is to be operational by March 2022, of which 40 GW is expected to come from grid connected solar rooftops.

16 COMPOSITE WATER MANAGEMENT INDEX 2.0

Context:

- NITI Aayog releases report on the Composite Water Management Index 2.0.

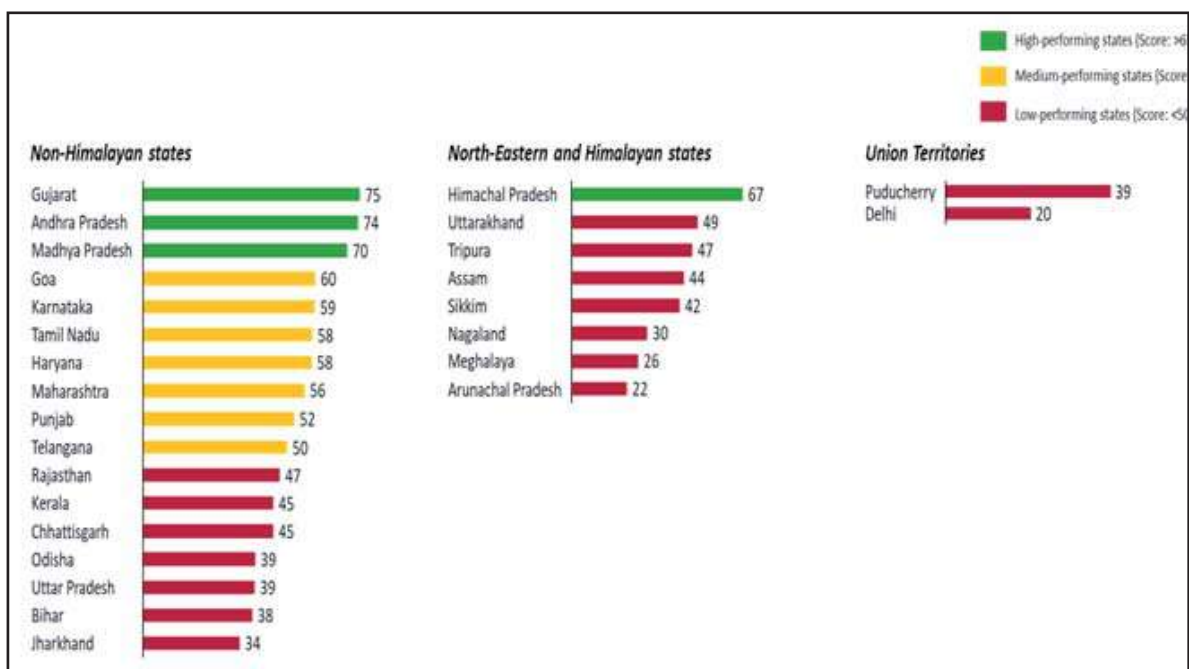
About:

- To supplement the efforts of Jal Shakti Ministry, NITI Aayog has prepared the second round of Composite Water Management Index (CWMI 2.0).
- Scientific management of water is increasingly recognized as being vital to India's growth and ecosystem sustainability. Government is being proactive about water management and has created the Ministry of Jal Shakti to consolidate interrelated functions pertaining to water management.

Jal Shakti Abhiyan - a campaign for water conservation and water security Launched by Jal Shakti Ministry.

- Gujarat hold on to its rank one** in the reference year (2017-18), followed by Andhra Pradesh, Madhya Pradesh, Goa, Karnataka and Tamil Nadu.
- The overall ranking for reference year 2017-18 and change in the rankings from the base year 2016-17 of different States in the Report is given in Charts-1 and Chart 2.

Chart 1: Ranking of Different States in CWMI 2.0 2019



Background

- NITI Aayog first launched and conceptualized the Composite Water Management Index in 2018 as a tool to in still the sense of cooperative and competitive federalism among the states.

- ▶ This was a first ever attempt at creating a pan-India set of metrics that measured different dimensions of water management and use across the lifecycle of water.
- ▶ The report was widely acknowledged and provided actionable guidance to States on where they were doing well absolutely and relatively and what they needed to focus on to secure their water future.
- ▶ The CWMI is an important tool to assess and improve the performance of States/ Union Territories in efficient management of water resources.
- ▶ This has been done through a first of its kind water data collection exercise in partnership with Ministry of Jal Shakti, Ministry of Rural Development and all the States/ Union Territories. The index would provide useful information for the States and also for the concerned Central Ministries/ Departments enabling them to formulate and implement suitable strategies for better management of water resources.

17**UNCCD COP14****Context:**

- 14th Conference of Parties (COP14) to the UN Convention to Combat Desertification (UNCCD) was held at India Expo Centre & Mart, Greater Noida.

About:

- Brazil, China, India, Nigeria, Russia and South Africa have agreed to make the Sustainable Development Goal of achieving land degradation neutrality a national target.
- Delhi Declaration will form the future course of action.
- Participants included were ministers and representatives of governments, non-government and intergovernmental organizations, scientists, women and youth from the 197 Parties. They will take decisions with actions that aim to strengthen land-use policies worldwide and address emerging threats, such as forced migration, sand and dust storms, and droughts.

About UNCCD:

- The UNCCD is an international agreement on good land stewardship.
- It helps people, communities and countries to create wealth grow economies and secure enough food and water and energy, by ensuring land users have an enabling environment for sustainable land management.
- Through partnerships, the Convention's 197 Parties set up robust systems to manage drought promptly and effectively. Good land stewardship based on a sound policy and science helps integrate and accelerate the achievement of the Sustainable Development Goals, builds resilience to climate change and prevents biodiversity loss.

18**MECHANISM REVISION OF ETHANOL PRICE FOR SUPPLY TO PUBLIC SECTOR OIL MARKETING COMPANIES****Context:**

- Cabinet approves Mechanism revision of ethanol price for supply to Public Sector Oil Marketing Companies (OMCs) for procurement of ethanol w.e.f. December'19 for one year period.

Ministry/Agency: Cabinet Committee on Economic Affairs (CCEA)

About:

- OMCs are advised to continue according to priority of ethanol from 1) sugarcane juice/sugar/sugar syrup, 2) B heavy molasses 3) C heavy molasses and 4) Damaged Food grains/other sources, in that order.
- All distilleries will be able to take benefit of the scheme and large number of them are expected to supply ethanol for the EBP programme. Remunerative price to ethanol suppliers will help in reduction of cane farmer's arrears, in the process contributing to minimizing difficulty of sugarcane farmers.
- Ethanol availability for EBP Programme is expected to increase significantly due to higher price being offered for procurement of ethanol from all the sugarcane based routes, subsuming "partial sugarcane juice route" and "100% sugarcane juice route" under "sugarcane juice route" and for the first time allowing sugar and sugar syrup for ethanol production. Increased ethanol blending in petrol has many benefits including reduction in import dependency, support to agricultural sector, more environmental friendly fuel, lesser pollution and additional income to farmers.

19

METHODS TO ENHANCE WATER SECURITY

Context:

- Highlighting the efforts of ICAR in scientific water management in line with the Jal Shakti Abhiyan Shri T. Mohapatra, DG ICAR and Secretary DARE said that measures like scheduling irrigation, constructive use of water, proper crop selection and utilising modern irrigation technologies are some major aspects which will enhance water security ensuring a high agricultural productivity.

Ministry/Agency: Ministry of Agriculture & Farmers Welfare

Benefits of Several Water Conservation Methods:

- About 35-40% water could be saved and 20-25% reduction in fertilizer use could be ensured by scheduling of irrigation.
- Moisture sensors and automated irrigation systems which can be controlled by a farmer using mobile phone will help in deciding the time and amount of irrigation to be carried out.
- Constructive use of water, which includes use of recycled water and proper selection of crops, also helps in enhancing water security.
- Alternatives like cultivation of Fruits, Millets, Bajra and selection of proper varieties of crops also ensure constructive utilisation of water.
- Using Bio mulch and Hydro Gels which ensures slow release of water and utilising microbes that help in efficient absorption of water shall help in further ensuring reduced and proper utilisation of water in agriculture.

Water availability and water use in India:

- India with a geographical area of 328 M ha supports more than 18% of the world's population, but has only 4.2% of freshwater resources.
- The country receives annual precipitation (including snowfall) of almost 4000 billion cubic meters (BCM), which results into estimated average water potential of 1869 BCM. Per capita annual water availability has declined from 5177 m³ in 1951 to 1508 m³ by 2014 and likely to reduce further to 1465 m³ and 1235 m³ by 2025 and 2050, respectively.
- Water is the critical input of agriculture and about 80% of the current water use is drawn by agriculture.

- Out of 140 million ha of net sown area in the country, net irrigated area accounts about 68.38 million ha (48.8%) and remaining 51.2% is under rainfed.
- Out of the net irrigated area, about 40% is irrigated through canal systems and 60% is irrigated through groundwater.

Important challenges:

- An important challenge facing the irrigation sector in India is the growing gap between Irrigation Potential Created (IPC) and Irrigation Potential Utilized (IPU), and uneven distribution of water over the length of the canal system.
- The overall irrigation efficiency of the major and medium irrigation projects is estimated to be around 38%. The efficiency of surface irrigation system can be improved from about 35-40% to around 50-60% and that of groundwater from about 65-70% to 72-75%.
- Low irrigation efficiency (35-40%), inequity in water distribution, mismatch between irrigation water supply and crop water demand, tail enders deprivation, irrigation induced salinity and waterlogging are some of the major challenges being faced in the canal commands.
- Similarly, in the groundwater irrigated command, indiscriminate withdrawal of groundwater has resulted in decline of groundwater table in North-Western and Southern regions.
- Contrary to this, the groundwater development in the Eastern region is sub-optimal. The stage of groundwater development in India is 63.3%. However, it is 166%, 140%, 137% and 120% in states of Punjab, Rajasthan, Haryana and Delhi, respectively, which has serious negative consequences.

20

ANGAN

Context:

- An international conference ANGAN (Augmenting Nature by Green Affordable New-habitat) focussed on Energy Efficiency was organised by the Bureau of Energy Efficiency (BEE).

Ministry/Agency: Ministry of Power

About:

- The International Conference provides a platform to deliberate on interdependence between organizations, systemic sustainability and feedback loops for better resource efficiency. Given the formidable challenge of providing adequate energy of desired quality to the consumers at reasonable costs, improving the efficiency in high energy consumption sectors like buildings have become important component of our integrated energy policy.
- Due to lack of awareness and knowledge about latest technologies, financial assistance, suppliers and purchase of energy efficient equipment, etc. efforts on energy efficiency and conservation in this sector have been moderate and therefore require greater push. This event aims to provide thrust in this direction so as to address such challenges faced by the stakeholders.

About Bureau of Energy Efficiency (BEE):

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

21

TRIFED-GIZ

Context:

- Union Minister for Tribal Affairs **Shri Arjun Munda** launched the Biggest Tribal movement to promote tribal enterprise through Bamboonomics in the country.

Ministry/Agency: Ministry of Tribal Affairs

About:

- TRIFED introduced the **"The 4P1000 Initiative: The Tribal Perspective through Bamboonomics"**.
- The 4P1000 Initiative: The international initiative "4per1000"**, launched by France on 1 December 2015 at the COP 21, consists of federating all voluntary stakeholders of the public and private sectors.
- TRIFED will involve the tribal community of India for rehabilitating the degraded land without compromising the income of the poor in the garb of environmentally friendly development.
- Bamboonomics** has been designed in such a way that while doing the environmental services, the tribals will be earning.
- TRIFED will integrate its PradhanMantri Van DhanYojna (PMVDY) with this new global environmental intervention termed as TICD (TRIFED's Initiative to Combat Desertification).
- TRIFED proposed a business model to supplement the income of tribal community and put it on the world scale by partnering with the German Cooperation (GIZ). It called for globalization of this movement by further international cooperation.
- TRIFED's message to UNCCD is that the 4P1000 Initiative with the tribal perspective through Bamboonomics is the best answer for combating desertification and rehabilitation of degraded wastelands.

22

CLIMATE SUMMIT FOR ENHANCED ACTION: A FINANCIAL PERSPECTIVE FROM INDIA

Context:

- Ministry of Finance brought out a Discussion Paper titled, "Climate Summit for Enhanced Action: A Financial Perspective from India".

About:

- Department of Economic Affairs, Ministry of Finance, Government of India has brought out a Discussion Paper titled "Climate Summit for Enhanced Action: A Financial Perspective from India" which examines various issues on climate finance comprehensively
 - Finance in Climate Treaties,
 - Climate Finance Delivery-A Reality Check,
 - the 3 Essential 'S's of Climate Finance- Scope, Scale and Speed,
 - India's Climate Actions despite Economic Imperatives,
 - Emergence of New "Priorities",
 - "Ambitions" and "Externalities"— **New Asks and Indian Response to Climate Emergency:** Some Considerations.
- The Discussion Paper makes an analysis of the post Paris Agreement developments and indicates that

more actions need to be taken to meet objectives of the Agreement, which in turn depends on the momentum of international climate finance, in terms of new and additional climate finance, technological and capacity building support. In essence, the 3 essential "S" s of climate finance has not been clearly translated into reality.

23**GANGA AAMANTRAN****Context:**

- Namami Gange launches Ganga Aamantran – a unique social awareness initiative to connect with the people.

About:

- The 'Ganga Aamantran Abhiyan' is a pioneering and historic exploratory open-water rafting and kayaking expedition on the Ganga River .
- Starting at Devprayag and culminating at Ganga Sagar, the expedition covers the entire stretch of over 2500 kms of the Ganga River.
- This is the first ever effort by National Mission for Clean Ganga to raft across the entire stretch of the river and also the longest ever social campaign undertaken through an adventure sporting activity to spread the message of River Rejuvenation and Water Conservation on a massive scale. The expedition will draw attention to the ecological challenges being faced by Ganga.
- The expedition will encompass the five Ganga basin states including Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal with stops at Rishikesh, Haridwar, Kanpur, Allahabad, Varanasi, Patna, Sonapur and Kolkata.
- Apart from the awareness campaign, the team from CSIR-Indian Institute of Toxicology Research will collect water samples from across diverse ranges of the river for the purpose of water testing, while members of the Wildlife Institute of India will undertake flora and fauna census for the year 2019.
- The Expedition would comprise of members primarily from the Indian Armed Forces. The Armed Forces is supporting this expedition extensively by way of involving all the Commands & Units on the Ganga stretch and also the members from the Armed Forces Wives Welfare Association all along the Ganga Basin.
- The expedition will be supported by all the stakeholders of Namami Gange including the MPs of the constituency along Ganga, members of Ganga Praharis, Ganga Vihar Manch among others. The expedition is aimed to reach millions of people on Ganga Basin and would be the largest social outreach through an adventure sporting event ever.

24**LOTUS-HR****Context:**

- India and Netherlands launched the second phase of the LOTUS-HR (Local Treatment of Urban Sewage streams for Healthy Reuseplant) as a part of joint collaboration.

About:

- The project was initiated in July 2017 and aims to demonstrate a novel holistic (waste) water management approach that will produce clean water which can be reused for various purposes.

- The innovative pilot scale modular plant upon commissioning will treat 10,000 L sewage water per day and will showcase a self-sustaining model for the end user.
- This pilot scale facility will employ multiple technologies so that the data generated at the pilot scale becomes a tool-box of treatment technologies for replication at other sites in Delhi as well as other parts of India where similar drains exist. The rationale is that the mixing and matching of technologies from this tool-box will depend on the quantity (flow rate) and quality (pollutant load) of drain water, land availability, site accessibility as well as topography.
- **The LOTUS-HR project is jointly supported by Department of Biotechnology, Ministry of Science and Technology, Government of India and Netherlands Organization for Scientific Research /STW, Government of Netherlands.**

25

FIRST NATIONAL PROTOCOL TO ENUMERATE SNOW LEOPARD POPULATION IN INDIA LAUNCHED

Context:

- In a major boost towards protecting and conserving Snow Leopards, Union Minister for Environment, Forest and Climate Change (MoEFCC), Shri Prakash Javadekar launched the First National Protocol on Snow Leopard Population Assessment in India, on the occasion of International Snow Leopard Day.

About:

- The inaugural session of the 4th steering committee meeting of the Global Snow Leopard & Ecosystem Protection (GSLEP) Program also marked the launch of the First National Protocol on Snow Leopard Population Assessment, to mark the occasion of International Snow Leopard Day (23rd October).
- The first National Snow Leopard Survey of the nation has been developed by scientific experts in association with the Snow Leopard States/UTs namely, Ladakh, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, and Arunachal Pradesh.
- The use of technology such as camera traps and scientific surveys will help to estimate the numbers.

The Global Snow Leopard and Ecosystem Protection Program (GSLEP):

- It seeks to address high-mountain development issues using the conservation of the charismatic and endangered snow leopard as a flagship.
- The GSLEP is a range-wide effort that unites range country governments, nongovernmental and inter-governmental organizations, local communities, and the private sector around a shared vision to conserve snow leopards and their valuable high-mountain ecosystems
- The GSLEP is a high-level inter-governmental alliance of all the 12 snow leopard range countries.
- The snow leopard countries namely, India, Nepal, Bhutan, China, Mongolia, Russia, Pakistan, Afghanistan, Kyrgyzstan, Kazakhstan, Tajikistan, and Uzbekistan.
- It majorly focuses on the need for awareness and understanding of the value of Snow Leopard for the ecosystem.
- The GSLEP Program (2019) was organized by the Ministry of Environment, Forest and Climate Change at New Delhi.
- The Steering Committee meetings of GSLEP is currently chaired by Nepal and co-chaired by Kyrgyzstan.

26

GLOBAL BIO-INDIA 2019**Context:**

- The Global Bio-India 2019, one of the largest biotechnology stakeholders conglomerate will be held for the first time in India at New Delhi.

About:

- India for the first time is hosting a mega event for the biotech community to attract investments, showcase our indigenous strengths and more importantly fuel the hopes and aspirations of the indigenous talent pool
- India's continued commitment in scientific research, its translation and commercialization and laid emphasis on how this event would be a huge opportunity to showcase India's strength and build new partnerships and investment opportunities.
- Biotech is one of the identified champion sectors in the Make in India 2.0. Our ambition for the event is to showcase the strength in the sector and let the world know India is the destination to invest
- It is noteworthy to point that Biotechnology is recognized as the key driver for contributing to India's USD 5Tn economy target and is identified as one of the thrust areas for driving GDP growth of our country. India is positioned today at about USD51bn and is marching towards USD150bn.
- The Summit assumes significance as it is one of the largest biotechnology stakeholders conglomerate to be held in India for the first time.

Very Severe Cyclonic Storm 'Bulbul':

- Very Severe Cyclonic Storm Bulbul is an active tropical cyclone which struck the Indian state of West Bengal.
- At Category 2 hurricane-equivalent intensity and is currently a flood and storm surge threat to Bangladesh.
- Originating from the remnants of Severe Tropical Storm Matmo over the southern Bay of Bengal.
- It is only the fourth tropical cyclone ever recorded to regenerate over the Andaman Sea, having crossed Southeast Asia overland.
- The cyclone has been named by Pakistan.

Wastelands Atlas' – 2019:

- The wasteland mapping exercise is carried out by National Remote Sensing Centre (NRSC), Department of Space using the Indian Remote Sensing Satellite (IRS) data.
- The atlas is then jointly published by The Department of Land Resources (Ministry of Rural Development) and National Remote Sensing Centre.
- The Wastelands Atlas – 2019 is the fifth edition of all atlases. The previous editions released were in 2000, 2005, 2010 and 2011.
- The changes in wastelands between 2008-09 and 2015-16 have been presented in this Atlas. The effort has resulted in estimating the spatial extent of wastelands for entire country to the tune of 55.76 Mha (16.96 % of geographical area of the Country) for the year 2015-16 as compared to 56.60 Mha (17.21%) in the year 2008-09.
- During this period 1.45 Mha of wastelands are converted into non wastelands categories. There is a net conversion of 0.84 Mha (0.26%) of different wasteland categories in the country during 2008-09 to 2015-16.
- A reduction in wasteland area was observed in the categories of land with dense scrub, waterlogged and marshy land, sandy areas, degraded pastures (grazing land) and gullied and ravinous land.

- It provides district and state wise distribution of different categories of wastelands area including mapping of about 12.08 Mha hitherto unmapped area of Jammu & Kashmir.
- The wastelands have undergone positive change in the states of Rajasthan (0.48 Mha), Bihar (0.11 Mha), Uttar Pradesh (0.10 Mha), Andhra Pradesh (0.08 Mha), Mizoram (0.057 Mha), Madhya Pradesh (0.039 Mha), Jammu & Kashmir (0.038 Mha) and West Bengal (0.032 Mha).
- Majority of wastelands have been changed into categories of 'croplands' (0.64 Mha), 'forest-dense / open' (0.28 Mha), 'forest plantation' (0.029 Mha), 'plantation' (0.057 Mha) and 'industrial area' (0.035 Mha).

27 NATIONAL POLICY ON BIOFUELS

- Government has notified the new National Policy on Biofuels. The salient features of the Policy are as under:
 - Categorization of biofuels as "Basic Biofuels" and "Advanced Biofuels",
 - Incentives, off-take assurance and viability gap funding for advanced biofuels,
 - Allowing B-molasses, sugarcane juice, damaged food grains and surplus food grains for ethanol production,
 - Setting up of supply chain mechanisms for biodiesel production from non-edible oilseeds, Used Cooking Oil, short gestation crops, and
 - Synergy of efforts by defining roles and responsibilities of all the concerned Ministries/Departments with respect to biofuels.

28 TIGER CORRIDORS IN COUNTRY

- The National Tiger Conservation Authority in collaboration with the Wildlife Institute of India has published a document titled "Connecting Tiger Populations for Long-term Conservation", which has mapped out 32 major corridors across the country, management interventions for which are operationalised through a Tiger Conservation Plan, mandated under section 38V of the Wildlife (Protection) Act, 1972.
- The list of macro/landscape level tiger corridors are as under:

Sl. No.	Landscape	Corridor	States/ Country
1.	Shivalik Hills & Gangetic Plains	Rajaji-Corbett	Uttarakhand
		(ii) Corbett-Dudhwa	Uttarakhand, Uttar Pradesh, Nepal
		(iii) Dudhwa-Kishanpur-Katerniaghat	Uttar Pradesh, Nepal
2.	Central India & Eastern Ghats	(i) Ranthambhore-Kuno-Madhav	Madhya Pradesh, Rajasthan
		(ii) Bandhavgarh-Achanakmar	Madhya Pradesh, Chhattisgarh
		(iii) Bandhavgarh-Sanjay Dubri-Guru Ghasidas	Madhya Pradesh
		(iv) Guru Ghasidas-Palamau-Lawalong	Chhattisgarh & Jharkhand
		(v) Kanha-Achanakmar	Madhya Pradesh, Chhattisgarh

	Central India & Eastern Ghats	(vi) Kanha-Pench	Madhya Pradesh, Maharashtra
		(vii) Pench-Satpura-Melghat	Madhya Pradesh, Maharashtra
		(viii) Kanha-Navegaon Nagzira-Tadoba-Indravati	Madhya Pradesh, Maharashtra, Chhattisgarh, Andhra Pradesh
		(ix) Indravati-Udanti Sitanadi-Sunabeda	Chhattisgarh, Odisha
		(x) Similipal-Satkosia	Odisha
		(xi) Nagarjunasagar-Sri Venkateshwara National Park	Andhra Pradesh
3.	Western Ghats	(i) Sahyadri-Radhanagari-Goa	Maharashtra, Goa
		(ii) Dandeli Anshi-Shravathi Valley	Karnataka
		(iii) Kudremukh-Bhadra	Karnataka
		(iv) Nagarhole-Pusphagiri-Talakavery	Karnataka
		(v) Nagarhole-Bandipur-Mudumalai-Wayanad	Karnataka, Kerala, Tamil Nadu
		(vi) Nagarhole-Mudumalai-Wayanad	Karnataka, Kerala, Tamil Nadu
		(vii) Parambikulam-Eranikulam-Indira Gandhi	Kerala, Tamil Nadu
		(viii) Kalakad Mundanthurai-Periyar	Kerala, Tamil Nadu
Sl. No.	Landscape	Corridor	States/ Country
4.	North East	(i) Kaziranga-Itanagar WLS	Assam, Arunachal Pradesh
		(ii) Kaziranga-Karbi Anglong	Assam
		(iii) Kaziranga-Nameri	Assam
		(iv) Kaziranga-Orang	Assam
		(v) Kaziranga-Papum Pane	Assam
		(vi) Manas-Buxa	Assam, West Bengal, Bhutan
		(vii) Pakke-Nameri-Sonai Rupai-Manas	Arunachal Pradesh, Assam
		(viii) Dibru Saikhowa-D'Ering-Mehaong	Assam, Arunachal Pradesh
		(ix) Kamlang-Kane-Tale Valley	Arunachal Pradesh
		(x) Buxa-Jaldapara	West Bengal

- Further, a 3 pronged strategy to manage human-tiger negative interactions has been advocated as follows:-
 - Material and logistical support:** Funding support through the ongoing Centrally Sponsored Scheme of Project Tiger, is provided to tiger reserves for acquiring capacity in terms of infrastructure and material, to deal with tigers dispersing out of source areas. These are solicited by tiger reserves through an Annual Plan of Operation (APO) every year which stems out from an overarching Tiger Conservation Plan (TCP), mandated under Section 38 V of the Wildlife (Protection) Act, 1972.

- **Restricting habitat interventions:** Based on the carrying capacity of tigers in a tiger reserve, habitat interventions are restricted through an overarching TCP. In case tiger numbers are at carrying capacity levels, it is advised that habitat interventions should be limited so that there is no excessive spill-over of wildlife including tigers thereby minimizing man-animal conflict. Further, in buffer areas around tiger reserves, habitat interventions are restricted such that they are sub-optimal vis-à-vis the core/critical tiger habitat areas, judicious enough to facilitate dispersal to other rich habitat areas only.
- **Standard Operating Procedure (SOPs):** The National Tiger Conservation Authority has issued following three SOPs to deal with man-animal conflict which are available in public domain:
 - To deal with emergency arising due to straying of tigers in human dominated landscapes
 - To deal with tiger depredation on livestock
 - For active management towards rehabilitation of tigers from source areas at the landscape level.
- In technical collaboration with the Wildlife Institute of India, the National Tiger Conservation Authority has also published a document titled 'Eco-Friendly measures to mitigate impacts of Linear infrastructure on wildlife' to safeguard these corridors from linear infrastructure development besides sensitizing user agencies which inter alia include Indian Railway Traffic Service Probationers, National Highways Authority of India personnel, Indian Railway Engineers, besides others.

29

BLUE FLAG CERTIFICATION FOR BEACHES

- The Ministry has embarked upon a programme for 'Blue Flag' Certification for select beaches in the country.
- This Certification is accorded by an international agency "Foundation for Environment Education, Denmark" based on 33 stringent criteria in four major heads i.e. (i) Environmental Education and Information, (ii) Bathing Water Quality, (iii) Environment Management and Conservation and (iv) Safety and Services in the beaches.
- The 'Blue Flag' beach is an Eco-tourism model endeavouring to provide to the tourists/beach goers clean and hygienic bathing water, facilities/amenities, safe and healthy environment and sustainable development of the area.
- 13 pilot beaches that have been identified for the certification, in consultation with concerned coastal States/UTs, are Ghoghala Beach (Diu), Shivrajpur beach (Gujarat), Bhogave (Maharashtra), Padubidri and Kasarkod (Karnataka), Kappad beach (Kerala), Kovalam beach (Tamil Nadu), Eden beach (Puducherry), Rushikonda beach (Andhra Pradesh), Miramar beach (Goa), Golden beach (Odisha), Radhanagar beach (Andaman & Nicobar Islands) and Bangaram beach (Lakshadweep).
- Rushikonda beach in Andhra Pradesh also features in the list of 13 pilot beaches, for development of facilities and infrastructure accordingly.

30

GREEN GOOD DEEDS' INITIATIVE

- The Ministry of Environment, Forest and Climate Change coordinates a Central Sector Scheme namely 'Environment Education, Awareness and Training' with an objective to promote environmental awareness among all sections of the society and to mobilize people's participation for conservation of environment.
- Through the National Green Corps programme, which is one of the components of this scheme, about one lakh fifty thousand Ecoclubs have been established in schools/colleges across the country and nearly 35 lakh students are actively involved in the programmes related to environment protection and conservation.

- The 'Green Good Deeds' initiative is about simple, practical steps that students/teachers/citizens can perform in their day-to-day life towards protection of environment.
- Taking forward the Green Good Deeds initiative, among other activities of the Ecoclubs, the Ecoclubs have been a centre stage for various environment protection and conservation activities like conducting cleanliness drives as part of Swachh Bharat Abhiyan, plantation drives, awareness on waste minimisation, waste segregation, recycling and reuse etc. Various environment awareness programmes are being undertaken by the students like minimizing the use of single-use plastic, celebrating Green Diwali, making of Eco-friendly idols of Ganesh and seed balls, adopting water bodies, beach cleaning, etc.

31 ECHO NETWORK

The Government has launched, 'EChO Network', a national program to provide a template for cross-disciplinary leadership in India with the specific focus of increasing research, knowledge, and awareness of Indian ecology and the environment.

What is EChO Network?

- EChO Network is a national program to provide a template for cross-disciplinary leadership in India while emphasising on increasing knowledge, research and awareness of Indian ecology and the environment.
- The Network will conduct interactive sessions with citizens, industry, academia, and the government and will identify gaps in knowledge regarding human and environmental ecosystems.

Significance of the Project:

- India faces unprecedented threats to its human environmental and ecosystems, solving which requires a confluence of India's strong technical expertise and knowledge of the natural world itself.
- EChO Network would develop a national network to catalyse a new generation of Indians who can synthesize interdisciplinary concepts and tackle real-world problems in medicine, agriculture, ecology, and technology.
- With no precedent for such a network anywhere in the world, EChO Network establishes a new platform to change how science is embedded in our modern society.

32 EV CHARGING STATIONS SANCTIONED IN FAME-II SCHEME

- To give a further push to clean mobility in Road Transport Sector, the **Department of Heavy Industries** has sanctioned 2636 charging stations in 62 cities across 24 States/UTs under FAME India (Faster Adoption and Manufacturing of Electric Vehicles in India) scheme phase II.
- Given is the state-wise list where charging stations have been allotted:

What is FAME Scheme?

- The Faster Adoption and Manufacture of (Hybrid and) Electric Vehicles (FAME) scheme, launched in 2015, is an incentive scheme for the promotion of electric and hybrid vehicles in the country.
- It aims to promote electric mobility by giving financial incentives for enhancing electric vehicle production and the creation of electric transportation infrastructure.
- Basically, the incentive is provided in the form of subsidies to manufacturers of electric vehicles and infrastructure providers of electric vehicles.
- The Scheme operates in two phases.

- **Phase I:** 2015 to March 31st, 2019
- **Phase II:** April 1st, 2019, will be completed by March 31st, 2022

33 NEW ENERGY PERFORMANCE STANDARDS FOR AIR CONDITIONERS

The Central Government in consultation with the Bureau of Energy Efficiency (BEE) has notified **new energy performance standards** for Room Air Conditioner (RACs) on 30th October 2019.

The New Standards:

- The **24°C** default setting has been made mandatory from Jan 1, 2020, for all room air conditioners covered under the ambit of BEE star-labelling program vide this notification.
- All brands and types of star labelled room air conditioners, namely, Multi-Stage Capacity Air Conditioners, Unitary Air Conditioners and Split Air Conditioners which are rated from one star to five star, based on their relative energy efficiencies up to a rated cooling capacity of 10,465 Watts (9,000 kcal/hour) and manufactured, commercially purchased or sold in India, shall ensure default setting of temperature in the room air conditioners at twenty-four degrees Celsius with effect from the 1st January 2020.

Background:

- BEE launched the voluntary star labelling program for fixed-speed room air conditioners (RACs) in 2006, and this program became mandatory on 12th January 2009.
- Thereafter, in 2015, voluntary star labelling program for inverter room air conditioners was launched and which was made mandatory with effect from 1st January 2018.
- The BEE star labelling program for Room Air Conditioners now covers both fixed and inverter RAC up to a cooling capacity of 10,465 watts (2.97 TR).
- **ISEER (Indian Seasonal Energy efficiency ratio)** is the energy performance index used for Room Air Conditioners (RACs) and its assessment is based on the bin hours defined in ISO 16358.

33 INDIA'S ENERGY POLICY REPORT

The government released the 'State Energy Efficiency Index 2019', which tracks the progress of Energy Efficiency (EE) initiatives in 36 states and union territories based on 97 significant indicators.

About the Index:

- The index is developed by **Bureau of Energy Efficiency (BEE)** in association with **Alliance for an Energy Efficient Economy (AEEE)**.
- The first such Index, the "State Energy Efficiency Preparedness Index 2018", was launched on August 1, 2018.

Key Takeaways for States:

- 'State EE Index 2019' shows that majority of the initiatives taken by states are related to Policies and Regulations.
- Most of the first-generation energy efficiency policies prepared by BEE under programmes on Standards & Labelling (S&L), ECBC, Perform Achieve & Trade (PAT), etc. are understood by states and as the next steps they should focus on ensuring greater compliance to achieve savings.
- Based on the analysis of responses submitted by states this year, a three-point agenda is suggested for consideration by state agencies:

- **Focusing on implementation:** Proactive role by states in policy formulation and implementation to shift the focus from “policies in place” to “policies successfully implemented”.
- **Strengthening the mechanism:** State Designated Agencies should further enhance their engagement with state departments and private sector to enable a robust mechanism for Energy Data Management System.
- **Enhancing the credibility of EE schemes:** Ensuring the integrity of programs that have direct or indirect linkages with common consumers is significant to energy efficiency market transformation. States must demonstrate an approach which includes enforcement and compliance checks as well as independent monitoring and verification of savings, which is integral to all EE policies and programs.

34

INDIA ACHIEVES COMPLETE PHASE OUT OF ONE THE MOST POTENT OZONE DEPLETING CHEMICAL

- India has successfully achieved the complete phase out of Hydrochlorofluorocarbon (HCFC)-141 b, which is a chemical used by foam manufacturing enterprises and one of the most potent ozone depleting chemical after Chlorofluorocarbons (CFCs) .
- HCFC)-141 b is used mainly as a blowing agent in the production of rigid polyurethane (PU) foams.
- India has consciously chosen a path for environment friendly and energy efficient technologies while phasing out Ozone Depleting Substances (ODSs).
- Importantly, India is one among the few countries globally and a pioneer in some cases in the use of technologies, which are non-Ozone Depleting and have a low Global Warming Potential (GWP).
- India had proactively and successfully taken the challenge of complete phase out of Hydrochlorofluorocarbon (HCFC)-141 b.

Ease of Living Index and Municipal Performance Index 2019

- To help assess the progress made in cities through various initiatives and empower them to use evidence to plan, implement & monitor their performance, two Assessment Frameworks, viz. **Ease of Living Index (EoLI)** and **Municipal Performance Index (MPI) 2019** have been launched by the **Ministry of Housing & Urban Affairs**.
- Both these indices are designed to assess the quality of life of citizens in 100 Smart Cities and 14 other Million Plus Cities.
 - With the **Municipal Performance Index 2019**, the Ministry has sought to assess the performance of municipalities based on five enablers namely Service, Finance, Planning, Technology and Governance which have been further divided into 20 sectors which will be evaluated across 100 indicators.
 - **Ease of Living Index** is aimed at providing a holistic view of Indian cities - beginning from the services provided by local bodies, the effectiveness of the administration, the outcomes generated through these services in terms of the liveability within cities and, finally, the citizen perception of these outcomes.

35

MT. ACONCAGUA

- Kaamya Karthikeyan, a class VII student of Navy Children School (NCS), Mumbai, became the youngest girl in the world to **summit Mt. Aconcagua, the highest peak in South America and outside of Asia**.
- She summited the mountain peak of 6962 m height on 01 Feb 2020 and unfurled the Indian tricolour.
- Aconcagua is located in **Argentina**, in the province of **Mendoza**, and lies 70 miles (112 kilometres) northwest of the provincial capital, Mendoza, and 9.3 miles (15 km) from the border with Chile.

- Part of the **Andes mountain range**, Aconcagua is the **second-highest of the Seven Summits** (the highest peaks on each continent), behind only Mount Everest in Asia.
- At 22,837 feet (6,961 meters), not only is it the highest mountain in South America, it is the tallest peak in all of the Americas, as well as the Southern and Western Hemispheres.

36

13TH CONFERENCE OF PARTIES (COP) OF THE CONVENTION ON THE CONSERVATION OF MIGRATORY SPECIES OF WILD ANIMALS (CMS)

- The **13th Conference of Parties (COP)** of the Convention on the **Conservation of Migratory Species of Wild Animals (CMS)**, an environmental treaty under the aegis of **United Nations Environment Programme**, is going to be hosted by India during 17th to 22nd February 2020 at Gandhinagar in Gujarat.
- **Theme:** The theme of CMS COP13 in India is, "Migratory species connect the planet and we welcome them home". The CMS COP 13 logo is inspired by 'Kolam', a traditional art form from southern India.
- As the host, India shall be designated the President for the next three years. The Government of India is Signatory to the Convention on Conservation of Migratory Wild Animals (CMS) since 1983.
- The Government of India has been taking necessary actions to protect and conserve migratory marine species.
- Seven species that include **Dugong, Whale Shark, Marine Turtle (two species)**, have been identified for preparation of Conservation and Recovery Action Plan.

37

STAR RATING OF MINES

- In order to promote green, safe and sustainable mining practices using technology as a tool, Ministry of Coal (MoC) has launched a web portal for star rating of coal mines.
- The portal enables all operational coal mines across India for self-rating, their subsequent validation by Coal Controller's Organization (CCO), further evaluation and finally award of star rating.
- Based on the star ratings obtained through a well-defined mechanism on this web portal, the highest-scoring mines in the country will be awarded in a public ceremony.

38

ATAL BHUJAL YOJANA (ABHY)

- Atal Bhujal Yojana (ATAL JAL) is an initiative for ensuring long term sustainability of ground water resources in the country.
- The Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti is adopting a mix of 'top down' and 'bottom up' approaches in identified ground water stressed blocks in seven states, representing a range of geomorphic, climatic and hydrogeologic and cultural settings.
- ATAL JAL has been designed with the principal objective of strengthening the institutional framework for participatory ground water management and bringing about behavioral changes at the community level for sustainable ground water resource management.

- The scheme envisages undertaking this through various interventions, including awareness programmes, capacity building, convergence of ongoing/new schemes and improved agricultural practices etc.
- The scheme aims to improve ground water management through community participation in identified priority areas in seven States, viz. Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh. Implementation of the scheme is expected to benefit nearly 8350 Gram Panchayats in 78 districts in these States.
- ATAL JAL has two major components:
 - Institutional Strengthening and Capacity Building Component for strengthening institutional arrangements for sustainable ground water management in the States including improving monitoring networks, capacity building, strengthening of Water User Associations, etc.
 - Incentive Component for incentivising the States for achievements in improved groundwater management practices namely, data dissemination, preparation of water security plans, implementation of management interventions through convergence of ongoing schemes, adopting demand side management practices etc.

39

HAR KAAM DESH KE NAAM': CORPORATES JOINS GANGA REJUVENATION

- Rivers in India have always been considered sacred and the Ganga river in particular, is the identity and lifeline of India.
- Pilgrim sites and urban centers have developed along the river. These centers have drawn sustenance from the river and have been thriving over time.
- Ghats and Crematoria are part of the lifestyle of people and pilgrimages to visit the holy river Ganga play a vital role in strengthening the People-River Connect.
- Gangotri and Badrinath being part of the Char Dham Yatra, are especially important.
- This MoU is a significant step for improving amenities and sanitation at these holy locations with the underlying spirit of partnership and of private corporates taking responsibility by contributing to the National Mission: Rejuvenation of the sacred river Ganga.
- The activities under the project include:
 - Construction of Bathing Ghats and Crematoria
 - Repair and modernization of existing Ghats and Crematoria
 - Providing public amenities on Ghats
 - Bank erosion protection works
 - Operation & Maintenance (O&M) for 5 years

Badrinath Bathing Ghat and Gangotri Bathing Ghat

- Badrinath Bathing Ghat is situated along the bank of river Alaknanda.
- Development of Badrinath Ghat includes the various components like Changing Room, Toilet with bio-digester and reed bed, water spout, chhatra, platform, signages, horticulture work, railing etc.
- Gangotri Ghat is situated along the bank of river Bhagirathi at Gangotri.
- One bathing ghat and one crematorium to be developed at Gangotri.
 - Benefits:
 - Rejuvenated Ghats, along the river, would improve the people -river connect and would also become places that reflect local culture and history.
 - Project will significantly improve the visual aesthetics of the area. For Ganga Rejuvenation, improvement in aesthetics is also an important aspect.

- River water quality improvement through reduction in disposal of untreated sewage, solid waste disposal, etc.
- Increase in Tourism which will create opportunities for local employment.
- Prevent the disposal of un-burnt / partially burnt bodies in the river and reduce the pollution due to cremation process.

40 POLYMER ELECTROLYTE MEMBRANE FUEL CELLS (PEMFC)

Scientists at International Advanced Research for Powder Metallurgy & New Materials (ARCI), Hyderabad, have developed **Polymer Electrolyte Membrane fuel cells (PEMFC)**.

About the Cell:

- PEMFC, in its entirety, have an advantage of operational capability at low-temperatures with applications in decentralised power generation systems.
- The fuel cell stack provides sustainable electricity using hydrogen gas without grid power). There is a wide range of applications for his innovation.
- Emergency operation centres backed with 10 kW system along with fuel cell stack, air moving subsystems, power control devices, and control and monitoring systems are being planned as natural disaster management measures.

41 HOUSE SPARROW

- Every year March 20 is observed as World Sparrow Day to raise awareness about the bird.
- House Sparrow, once an integral part of our immediate environment, all but disappeared almost two decades ago.
- The common bird that lived in the cavities of our houses and polished off our leftover food, today sits on the red list of the **endangered species** of **The International Union for Conservation of Nature (IUCN)**.
- Scientific studies have established that the house sparrows follow us everywhere and simply cannot live where we don't.
- Fossil evidence from a cave in Bethlehem dating back 4,00,000 years suggests that the house sparrow shared its space with early humans.
- According to a 2018 Royal Society of London report, the bond between humans and sparrows goes back 11,000 years, and the starch-friendly genes of the house sparrow tell us a story linked to our own evolution.
- Agriculture triggered similar adaptation in three very different species – dogs, house sparrows and humans.

42 GLACIERS IN SIKKIM ARE LOSING MASS FASTER THAN OTHER PARTS OF THE HIMALAYA

Scientists from Wadia Institute of Himalayan Geology (WIHG) have found that glaciers in Sikkim are melting at a higher magnitude as compared to other Himalayan regions.

Highlights of the findings:

- The study assessed the response of 23 glaciers of Sikkim to climate change for the period of 1991-2015 and revealed that glaciers in Sikkim have retreated and deglaciated significantly from 1991 to 2015.
- Small-sized glaciers in Sikkim are retreating while larger glaciers are thinning due to climate change.
- Compared to other Himalayan regions, the magnitude of dimensional changes and debris growth are higher in the Sikkim.
- A major shift in glacier behavior has occurred around 2000.
- Contrary to the western and central Himalaya, where glaciers are reported to have slowed down in recent decades, the Sikkim glaciers have shown negligible deceleration after 2000.
- Summer temperature rise has been prime driver of glacier changes.

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14



**SCIENCE
& TECHNOLOGY**

1

THE DNA TECHNOLOGY (USE AND APPLICATION) REGULATION BILL - 2019

Context:

- In a landmark decision, the Lok Sabha passed "The DNA Technology (Use and Application) Regulation Bill - 2019". The Bill has been formulated recognizing the need for regulation of the use and application of Deoxyribonucleic Acid (DNA) technology, for establishing identity of missing persons, victims, offenders, under trials and unknown deceased persons.

About:

- The purpose of this Bill is to expand the application of DNA-based forensic technologies to support and strengthen the justice delivery system of the country.
- The utility of DNA based technologies for solving crimes, and to identify missing persons, is well recognized across the world.
- By providing for the mandatory accreditation and regulation of DNA laboratories, the Bill seeks to ensure that with the proposed expanded use of this technology in this country, there is also the assurance that the DNA test results are reliable, and furthermore that the data remain protected from misuse or abuse in terms of the privacy rights of our citizens.

The key components of this Bill include:

- Establishment of a DNA Regulatory Board.
- Accreditation of DNA laboratories undertaking DNA testing and analysing.
- Establishment of the National and Regional DNA Data Banks, as envisaged in the Bill, will assist in forensic investigations. This will aid in scientific up-gradation and streamlining of the DNA testing activities in the country with appropriate inputs from the DNA Regulatory Board which would be set up for the purpose.
- The Bill will add value in empowering the criminal justice delivery system by enabling the application of DNA evidence, which is considered the gold standard in crime investigations.

2

OPERATION DIGITAL BOARD (ODB)

Context:

- The Minister of Human Resource Development launched Operation Digital Board to leverage technology in order to boost quality education in the country.

About:

- Under Operation Digital Board seven lakh classrooms of 9th, 10th and 11th standards and two lakh classrooms of colleges and Universities will be equipped with digital boards in the next three years.
- UGC will be the implementing agency for ODB in Higher Education institutions. The central government will implement the scheme in the schools in association with state government.

Salient Features:

- ODB is a revolutionary step which will make both learning as well as the teaching process interactive and popularize flipped learning as a pedagogical approach.

- Operation Digital Board has been launched on the lines of Operation Blackboard to provide better digital education in schools.
- The initiative is aimed at improving the quality of education and offer new opportunities and new ways of teaching and learning.
- The Operation Digital Board will aid in the provisioning of personalised adaptive learning as well as Intelligent Tutoring by exploiting emerging technologies like Machine Learning, Artificial Intelligence & Data Analytics.

3**ATMOSPHERIC WATER GENERATOR (AWG)****Context:**

- Navratna Defence PSU Bharat Electronics Ltd (BEL) has unveiled its new product, the Atmospheric Water Generator (AWG), an innovative solution to meet the ever-increasing need for drinking water worldwide at Aero India 2019.

About

- BEL's Atmospheric Water Generator can be used to generate water straight from the humidity present in the atmosphere.
- It employs a novel technology to extract water from the humidity present in the atmosphere and purify it. It uses heat exchange for condensing the atmospheric moisture to produce pure, safe and clean potable water.
- The AWG comes with a Mineralisation Unit, which is used to add minerals which are required to make the water potable.
- It can be used to provide drinking water in community centres and public places like health care centres, schools, colleges, offices, railway stations, bus stands, airports, sea ports, off-shore oil rigs, military establishments, remote field areas and remote establishments and residential complexes.

4**SUPER-EFFICIENT AIR CONDITIONING PROGRAMME****Context:**

- Energy Efficiency Services Limited (EESL), a joint venture of four National Public Sector Enterprises under Ministry of Power, Government of India, launched its Super-Efficient Air Conditioning Programme for residential and institutional consumers in the BSES area.

About:

- These Super-Efficient Air Conditioners are 40 percent more efficient, but priced comparably with, the 3-star ACs currently available in the market (ISEER 3.8). EESL is working towards making this programme and its benefits available to all consumers across the nation with the other DISCOMs likely to partner with EESL in future.
- Besides promoting energy efficiency, the Super-Efficient AC programme will also help to reduce the peak power demand in South and West Delhi by 22MW, enabling the two organisations to harness synergies to promote energy security and sustainability.
- The programme directly addresses the prospect of the nearly four-fold increase in energy consumption from buildings and cooling appliances in India by 2032, while also addressing goals of India's Cooling Action Plan and Hydrochlorofluoro carbons Phase out Management Plan, enabling achievement of India's targets under the Kigali and Paris Agreements.

- EESL's investment in the programme is partially supported by a grant from the Global Environment Facility (GEF), an independent financing mechanism that was established on the eve of the 1992 Rio Earth Summit to address global environmental issues.

The Global Environment Facility (GEF)

- ▶ It was established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems.
- ▶ An independently operating financial organization, the GEF provides grants for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer, persistent organic pollutants (POPs), mercury, sustainable forest management, food security, sustainable cities.

5

NATIONAL POLICY ON SOFTWARE PRODUCTS – 2019

Context:

- The Union Cabinet, chaired by the Prime Minister has approved the National Policy on Software Products - 2019 to develop India as a Software Product Nation.

About:

- The Software product ecosystem is characterized by innovations, Intellectual Property (IP) creation and large value addition increase in productivity, which has the potential to significantly boost revenues and exports in the sector, create substantive employment and entrepreneurial opportunities in emerging technologies and leverage opportunities available under the Digital India Programme, thus, leading to a boost in inclusive and sustainable growth.

Implementation strategy and targets:

- The Policy will lead to the formulation of several schemes, initiatives, projects and measures for the development of Software products sector in the country as per the roadmap envisaged therein.
- To achieve the vision of NPSP-2019, the Policy has the following **five Missions**:
 - To promote the creation of a sustainable Indian software product industry, driven by intellectual property (IP), leading to a ten-fold increase in India share of the Global Software product market by 2025.
 - To nurture 10,000 technology start-ups in software product industry, including 1000 such technology start-ups in Tier-II and Tier-III towns & cities and generating direct and in-direct employment for 3.5 million people by 2025.
 - To create a talent pool for software product industry through (i) up-skilling of 1,000,000 IT professionals, (ii) motivating 100,000 school and college students and (iii) generating 10,000 specialized professionals that can provide leadership.
 - To build a cluster-based innovation driven ecosystem by developing 20 sectoral and strategically located software product development clusters having integrated ICT infrastructure, marketing, incubation, R&D/test beds and mentoring support.
 - In order to evolve and monitor scheme & programmes for the implementation of this policy, National Software Products Mission will be set up with participation from Government, Academia and Industry.

6

NATIONAL POLICY ON ELECTRONICS 2019**Context:**

- The Union Cabinet gave its approval to the National Policy on Electronics 2019 (NPE 2019), proposed by the Ministry of Electronics and Information Technology (MeitY).

About:

- The Policy envisions positioning India as a global hub for Electronics System Design and Manufacturing - (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.

Salient Features of NPE 2019:

- Provide incentives and support for manufacturing of core electronic components and enhancing availability of skilled manpower, including re-skilling.
- Provide special package of incentives for mega projects which are extremely high-tech and entail huge investments, such as semiconductor facilities display fabrication, etc.
- Formulate suitable schemes and incentive mechanisms to encourage new units and expansion of existing units.
- Promote Industry- led R&D and innovation in all sub-sectors of electronics, including grass root level innovations and early stage Start-ups in emerging technology areas such as 5G, IoT/ Sensors, Artificial Intelligence (AI), Machine Learning, Virtual Reality (VR), Drones, Robotics, Additive Manufacturing, Photonics, Nano-based devices, etc.
- Special thrust on Fabless Chip Design Industry, Medical Electronic Devices Industry, Automotive Electronics Industry and Power Electronics for Mobility and Strategic Electronics Industry.
- Create Sovereign Patent Fund (SPF) to promote the development and acquisition of IPs in ESDM sector.
- Promote trusted electronics value chain initiatives to improve national cyber security profile.

Major Impact:

- The NPE 2019 when implemented will lead to formulation of several schemes, initiatives, projects, etc., in consultation with the concerned Ministries/ Departments, for the development of ESDM sector in the country.
- It will enable flow of investment and technology, leading to higher value addition in the domestically manufactured electronic products, increased electronics hardware manufacturing in the country and their export, while generating substantial employment opportunities.

7

CHILDREN SCIENCE CONGRESS**Context:**

- Nobel Laureates inaugurated Children Science Congress at the Indian Science Congress, 2019.

About:

- Rashtriya Kishore Vaigyanik Sammelan (RKVS)/ Children Science Congress is an important part of Indian Science Congress as it focuses on raising the bar of research and innovation in science in our country.
- The main objective of the RKVS is to provide a platform to the budding scientists to showcase their research work and projects being developed by them.

- The event will consist of invited talks by renowned scientists and various competitions such as science exhibitions, scientific quizzes. Workshops are being conducted to give the students hands on experience.

8 INDIAN SCIENCE CONGRESS (ICSA)

- The first meeting of ISCC was held in January 1914 in Asiatic Society, Kolkata. It meets annually in the first week of January.
- ISCA works under Department of Science & Technology, Ministry of Science & Technology (Government of India).
- The two British chemists, namely, Professor J. L. Simonsen and Professor P. S. MacMahon thought that scientific research in India might be stimulated if an annual meeting of research workers somewhat on the lines of the British Association for the Advancement of Science could be arranged. This led to the establishment of the Indian Science Congress Association and the annual session of the Indian Science Congress.
- The 105th edition of ISC was held at Manipur Central University in Imphal, Manipur with theme "Reaching the Unreached Through Science & Technology."
- The 106th Indian Science Congress was held at Lovely Professional University (LPU) in Jalandhar, Punjab in January 2019.

9 TIME CAPSULE

Context:

- Time Capsule buried to preserve for 100 years to give glimpse of today's technology for future generations.

About:

- The Time Capsule contains 100 items that represent modern-day technology as experienced in India. Besides replicas of **Mangalyaan, Brahmos Missile and Tejas** fighter jet representing India's scientific prowess, the Capsule contains laptop, landline phone, smart phone, drone, VR glasses, stopwatch, Amazon Alexa etc.
- It also includes consumer durables like air filter, induction cooktop, air fryer etc which are part of our day-to-day life.
- Some other products preserved are solar panels, hard disk with latest documentaries and movies and current science books being used for teaching class 12 students and a mirror-less camera.
- The Capsule made by students from various departments of Lovely Professional University, was buried at a depth of 10 feet and will remain buried for the next 100 years. A plaque has been erected wherein it has been written that the Time Capsule will be opened on 3rd January, 2119.

10 QUALITY ASSURANCE SCHEME

Context:

- For sensitizing small laboratories to basic doable quality practices, National Accreditation Board for Testing and Calibration Laboratories (NABL) launched voluntary scheme called Quality Assurance Scheme (QAS) for Basic Composite (BC) Medical Laboratories (Entry Level) in February, 2019.

About:

- The laboratories performing only basic routine tests like blood glucose, blood counts, rapid tests for common infections, liver & kidney function tests and routine tests of urine will be eligible to apply under this scheme.
- The scheme requires minimal documentation and a nominal fee has been prescribed for availing the scheme. Components of competence assessment have been added for assuring quality and validity of test results.
- The scheme will help to bring quality at the grass root level of India's health system where laboratories follow the imperatives of quality in all their processes.
- This will inculcate the habit of quality and facilitate the laboratories to achieve benchmark accreditation of ISO 15189 over a period of time.
- Through this scheme, patients availing services of small labs in primary health centers, community health centers, doctor's clinic, standalone small labs, labs in small nursing homes will also have access to quality lab results.

National Accreditation Board for Testing & Calibration Laboratories (NABL)

- It is an autonomous society providing Accreditation (Recognition) of Technical competence of a testing, calibration, medical laboratory & Proficiency testing provider (PTP) & Reference Material Producer (RMP) for a specific scope following respective ISO standards.
- It has Mutual Recognition Arrangements with Asia Pacific Laboratory Accreditation Cooperation (APLAC), Mutual Recognition Arrangement (MRA), and International Laboratory Accreditation Cooperation (ILAC).
- NABL provides accreditation in all major fields of Science and Engineering such as Biological, Chemical, Electrical, Electronics, Mechanical, Fluid-Flow, Non-Destructive, Photometry, Radiological, Thermal & Forensics under testing facilities and Electro-Technical, Mechanical, Fluid Flow, Thermal, Optical & Radiological under Calibration facilities.
- NABL also provides accreditation for medical testing laboratories.
- In addition, NABL also offers accreditation for Proficiency testing providers & Reference Material producers and is now signatory to APLAC MRA for both.

11**BLOCKCHAIN BASED COFFEE E-MARKETPLACE****Context:**

- Commerce Secretary launched blockchain based coffee e-marketplace in New Delhi.

About:

- India is the only country in the world where entire coffee is grown under shade, handpicked and sun dried.
- Blockchain based market place app for trading of Indian coffees is intended to bring in transparency in the trade of Indian coffee.
- The blockchain will reduce the number of layers between coffee growers and buyers and help farmers double their income.
- This initiative will help in creating a brand image for Indian Coffee through traceability in reducing growers dependency on intermediaries by having a direct access to buyers for a fair price for their produce, in finding right coffee suppliers for exporters and within the stipulated time to meet the growing

demands and in building a better trust and long term relationship due to increased visibility towards the traceability and transparency of the produce.

- A block is created for each of the lot the farmer sells on the Blockchain. The credentials of the block/ lot will be stored on the Blockchain throughout its journey and are immutable.

Blockchain

- ▶ It is nothing but a digital ledger. That is a book containing accounts to which debits and credits are posted from books of original entry.
- ▶ A blockchain is an anonymous online ledger that uses a data structure to simplify the way we transact. Without the help of third party blockchain allows users to manipulate the ledger in a secure way.
- ▶ It protects the identities of the users. This way blockchain is a more secure way to carry out transactions. Each list of records in a blockchain is called a block. That is why it is known as blockchain because the various growing list of records i.e. blocks are linked and secured.
- ▶ It brings everyone to the highest degree of accountability. With the help of this technology no more transactions will be missed, human or machine errors will be minimised etc.
- ▶ In 2008, Blockchain Technology was invented by Satoshi Nakamoto for use in the cryptocurrency bitcoin, as its public transaction ledger.

12 BIOMEDICAL RESEARCH CAREER PROGRAMME

Context:

- Cabinet approved five year's extension of Biomedical Research Career Programme.

About:

- It is implemented by Department of Biotechnology and UK-based biomedical research charity – Wellcome Trust.
- It was launched in 2008 and has fulfilled its objectives of building and nurturing talent of highest global standards in cutting-edge biomedical research in India.
- It has enabled high quality Indian scientists working abroad to return to India and has increased number of locations geographically within India where world-class biomedical research is undertaken.
- It has also led to important scientific breakthroughs and applications to meet societal needs.
- With five-year extension, DBT will increase its commitment to programme by two times, in comparison to that of Wellcome Trust.
- In the five-year extension phase, the programme will continue to capacity building and strengthening clinical research and address important health challenges for India.

13 NUGEN MOBILITY SUMMIT 2019

Context:

- The International Centre for Automotive Technology (ICAT) is organized a NuGen Mobility Summit, 2019, at Manesar, NCR, from 27th to 29th November 2019.

About:

- The objective of the Summit is to share new ideas, learnings, global experiences, innovations and future technology trends for faster adoption, assimilation and development of advanced automotive technologies for a smarter and greener future.
- This event will help in building a platform for bringing together all stakeholders in the automotive industry to understand global advancements in technologies.
- Experts working with leading international scientific and research organizations and testing laboratories from various countries like USA, Europe, Japan and other Asian countries will also participate in the event and share their experiences and knowledge on development of smart and green technologies and the challenges that the industry needs to overcome.
- The event aims to bring together the automotive OEMs, professionals, researchers, academic experts, vehicle system suppliers, test equipment supplier, quality managers, product planners, component developers, SAE members and students from all over the world.
- ICAT Centre-II is under brisk renovation to create a world-class state-of-the-art facility for organizing such significant and sizeable events for the automotive fraternity. Several kinds of tracks such as coast down track, oval track, abs track, hill track and flood track will be available for demonstrations and events.
- ICAT Manesar is a division of NATRIP Implementation Society (NATIS) under the Department of Heavy Industries, Government of India. It provides services for testing, validation, design and homologation of all categories of vehicles and has a mission to assist the automotive industry in adopting cutting edge technologies in vehicle evaluation and component development to ensure reliability, durability and compliance to the current and future regulations in new generation mobility solutions.

14**REDEFINED UNITS OF MEASUREMENT OF KILOGRAM, KELVIN, MOLE AND AMPERE****Context:**

- After decades of ground-breaking laboratory works, the world's scientific and technical community, in a landmark and historic decision taken in the recent open session of the **General Conference on Weights and Measures (CGPM)** at BIPM on 16 November 2018, has unanimously adopted the resolution to redefine four of the seven base units, the kilogram (SI unit of weight), Kelvin (SI unit of temperature), mole (SI unit of amount of substance), and ampere (SI unit of current).

About:

- The new SI is being implemented worldwide from 20th May 2019 i.e. the World Metrology Day.
- The World Metrology Day (WMD) is celebrated annually on this very day as the Metre Convention was signed by representatives of seventeen nations on May 20, 1875. The Convention set the framework for global collaboration in the science of measurement and in its industrial, commercial and societal applications.
- The definition of the kilogram for more than 130 years, the International Prototype of the Kilogram (IPK), a cylinder of a platinum alloy stored at the BIPM in France, will now be retired. It will be replaced by the **Planck constant** -- the fundamental constant of **quantum physics**.
- This decision has now enabled scientists and researchers to base the SI units entirely on fundamental properties of nature, which will ensure their ongoing refinement and improvement for years to come.
- The fundamental constants are invariants of time and space and successfully replaced the artifact based units, and aptly opened up the new era for quantum world by linking all seven base units to fundamental constants/quantum standards.
- India also adopted a global resolution to redefine four of the seven base units – kilogram, kelvin, mole and ampere – that was accepted by representatives from 60 countries at the General Conference on Weights and Measures in Versailles, near Paris.

How will the kilogram be measured?

- For more than a century, the kilogram was defined by a metal cylinder, made of platinum-iridium alloy, kept in a vault in Paris called the International Prototype of the Kilogram.
- However, there was always a possibility of the cylinder losing mass or gaining some because of extraneous factors, thereby altering the definition. Scientists indeed found by comparing the cylinder with its copies distributed across the world that despite their efforts to protect the cylinders, their mass changed.
- Now, a kilogram will be defined using the Planck constant, which relates a photon's energy to its frequency. The Planck constant describes the behaviour of particles and waves on the atomic scale. It depends on three units: metre, kilogram and second. As second and metre are measured and defined using the speed of light, they can be used with the fixed Planck constant to define a kilogram. Although the value of the kilogram will not change, the redefinition will ensure its reliability, and enable far more accurate mass measurements.
- The new definitions impact four of the seven base units of the SI: the kilogram, ampere, kelvin and mole; and all units derived from them, such as the volt, ohm and joule.
 - The kilogram -- will be defined by the Planck constant (h)
 - The ampere -- will be defined by the elementary electrical charge (e)
 - The kelvin -- will be defined by the Boltzmann constant (k)
 - The mole -- will be defined by the Avogadro constant (N_A)
- Standard Particle Model of Quantum Mechanics is a mathematical model which explains the particle-wave nature of sub-atomic particles. This model proposed two major groups of elementary particles of matter, i.e. Quarks and Leptons.
- The model also proposed elementary force carriers known as Gauge Bosons (responsible for the forces in nature) and one Higgs Boson. Standard Particle Model explains the matter-energy conversions, with the help of Quarks, Leptons, Gauge Bosons and Higgs Boson.

General Conference on Weights and Measures (CGPM):

- It is the supreme authority of the International Bureau of Weights and Measures. The inter-governmental organization established in 1875 under the terms of the Metre Convention through which Member States act together on matters related to measurement science and measurement standards.

Quantum mechanics (QM):

- Quantum mechanics also known as quantum physics, quantum theory, the wave mechanical model, or matrix mechanics, is a fundamental theory in physics which describes nature at the smallest scales of energy levels of atoms and subatomic particles.

Planck Constant:

- The Planck constant is a physical constant that is the quantum of electromagnetic action, which relates the energy carried by a photon to its frequency. A **photon's** energy is equal to its frequency multiplied by the Planck constant. The Planck constant is of fundamental importance in **quantum mechanics**, and in metrology it is the basis for the definition of the kilogram.

Photon:

- The photon is a type of elementary particle, the quantum of the electromagnetic field including electromagnetic radiation such as light, and the force carrier for the electromagnetic force (even when static via virtual particles). Invariant mass of the photon is zero; it always moves at the speed of light within a vacuum.

15

INITIATIVE TO CONTROL FOOT AND MOUTH DISEASE (FMD) AND BRUCELLOSIS

Context:

- The Cabinet had cleared a total outlay of Rs. 13,343 crores to fully control these diseases amongst the livestock in the country in the next five years and subsequently eradicate these diseases.
- This decision indicates the spirit of compassion towards those animals who are a valued part of our planet but are not able to speak.

About:

- This initiative pertains to controlling Foot and Mouth Disease (FMD) and Brucellosis to support the livestock rearing farmers.
- **Threat of Foot and Mouth Disease (FMD) and Brucellosis:**
 - These diseases are very common amongst the livestock – cow-bulls, buffaloes, sheep, goats, pigs etc.
 - If a cow/buffalo gets infected with FMD, the milk loss is upto 100% which could last for four to six months.
 - Further, in case of Brucellosis the milk output reduces by 30%, during the entire life cycle of animal. Brucellosis also causes infertility amongst the animals.
 - The infection of brucellosis can also be transmitted to the farm workers and livestock owners.
 - Both the diseases have a direct negative impact on the trade of milk and other livestock products.

16

THORIUM-BASED NUCLEAR REACTORS

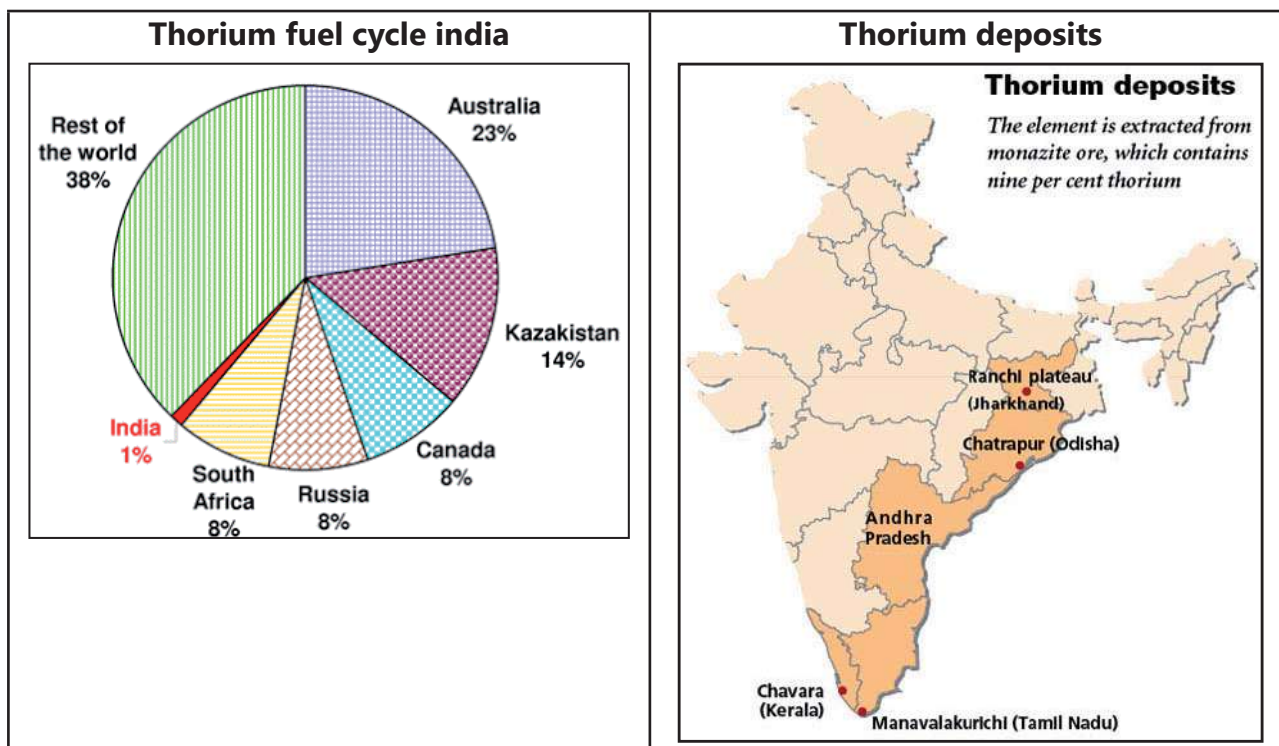
Context:

- Department of Atomic Energy (DAE) has planned the use of large deposits of Thorium available in the country as a long-term option.

About:

- A three-stage nuclear power programme has been chalked out to use Thorium as a viable and sustainable option, right at the inception of India's nuclear power programme.
- The three stage nuclear power programme aims to multiply the domestically available fissile resource through the use of natural Uranium in Pressurized Heavy Water Reactors, followed by use of Plutonium obtained from the spent fuel of Pressurized Heavy Water Reactors in Fast Breeder Reactors.
- Large scale use of Thorium will subsequently follow making use of the Uranium-233 that will be bred in Reactors. The utilisation of Thorium, as a practically inexhaustible energy source, has been contemplated during the third stage of the Indian Nuclear Programme.
- As is the case with generation of electricity from Uranium, there will be no emission of green house gases from Thorium also and therefore, it will be a clean source of energy.
- It is not possible to build a nuclear reactor using Thorium (Thorium-232) alone due to its physics characteristics. Thorium has to be converted to Uranium-233 in a reactor before it can be used as fuel.
- Development of technologies pertaining to utilization of thorium has been a part of ongoing activities in Department of Atomic Energy. With sustained efforts over the years, India has gained experience in different areas of Thorium fuel cycle.

- Efforts are currently on to enlarge the present Thorium related R&D work and activities to a bigger scale and towards development of technologies for the third stage of our nuclear power programme.
- Commercial utilization of Thorium, on a significant scale can begin only when abundant supplies of either Uranium-233 or Plutonium resources are available. Accordingly, the large scale introduction and utilization of Thorium in the programme has been contemplated after an adequate inventory of Plutonium becomes available from our Fast Breeder Reactors (FBRs), comprising the second stage of Indian nuclear power programme. This will be after a few decades of large scale deployment of FBRs.
- In preparation for the utilisation of Thorium in Third Stage of India's Nuclear Power Programme, efforts towards technology development and demonstration are made now so that a mature technology for Thorium utilization is available in time.



17

MODERNIZATION OF TECHNOLOGY TO DOUBLE THE INCOME OF FARMERS

Context:

- The Government has set a target of doubling of farmers' income by the year 2022. The Government has constituted an Inter-Ministerial Committee to examine issues relating to doubling of farmers' income and recommend a strategy to achieve doubling of farmers' income in real terms by the year 2022.

About:

- The committee has, inter-alia, appreciated the role of Digital Technology, which can play a transformational role in modernizing and organizing how rural India performs its agricultural activities. The technologies include **Artificial Intelligence, Big Data Analytics, Block chain Technology, Internet of Things** etc. The deployment of technology is very important to make schemes of the Ministry successful.

Major technology interventions include:

- Development of **Kisan Suvidha** mobile application to facilitate dissemination of information to farmers

on the critical parameters viz., Weather; Market Prices; Plant Protection; input Dealers (Seed, Pesticide, Fertilizer) Farm Machinery; Soil Health Card; Cold Storages & Godowns, Veterinary Centres and Diagnostic Labs.

- **The Indian Council of Agriculture Research (ICAR)** has also compiled more than 100 mobile apps developed by ICAR, State Agricultural Universities and Krishi Vigyan Kendras and uploaded on its website. These mobile apps developed in the areas of crops, horticulture, veterinary, dairy, poultry, fisheries, natural resources management and integrated subjects, offer valuable information to the farmers, including package of practices, market prices of various commodities, weather related information, advisory services, etc.
- Development of **mKisan Portal** for sending advisories on various crop related matter to the registered farmers through SMS.
- Launching of **e-National Agriculture Market** initiative to provide farmers an electronic online trading platform.
- Implementation of Agricultural Marketing Infrastructure, sub-scheme of Integrated Scheme of Agricultural Marketing, in order to improve/create scientific storage capacity for storing farm produce, processed farm produce and to reduce post-harvest storage loss.
- Introduction of **Soil Health Card Scheme** to assist State Governments in providing Soil Health Cards to all farmers across the country once in a cycle of 2 years.
- Providing subsidies under **National Food Security Mission** (Oil Seeds and Oil Palm) to farmers on seed components, transfer of technologies, production inputs and water carrying devices. Financial assistance is also being provided under this scheme for block demonstration, frontline demonstration, and farmers training to educate farmers to adopt modern techniques of farming to yield good crop economically.
- Use of space technology for various programmes/ areas such as Forecasting Agricultural Output using Space, Agro-meteorology and Land-based Observations project, Coordinated programme on Horticulture Assessment and Management using geo-informatics project, National Agricultural Drought Assessment and Monitoring System, Rice-Fallow Area Mapping and intensification, geo tagging of infrastructure and assets created under Rashtriya Krishi Vikas Yojana, and Crop Insurance.
- Using machine learning process along with different computer algorithm for crop classification and area estimation.

18

SETTING UP OF NEUTRINO OBSERVATORY

Context:

- Government of India has approved a project to build the **India-based Neutrino Observatory** (INO) at Pottipuram in the Theni District of Tamil Nadu.

About:

- The project aims to set up a 51000 ton Iron Calorimeter (ICAL) detector to observe naturally occurring atmospheric neutrinos in a cavern at the end of an approximately 2 km long tunnel in a mountain.
- The **Tata Institute of Fundamental Research** is the nodal institution. The observatory is to be built jointly with the **Department of Atomic Energy** and the **Department of Science and Technology**.
- This will help to reduce the noise from cosmic rays that are ever present over-ground and which would outnumber the rare neutrino interactions even in a detector as large as ICAL.
- The INO project does not disturb the ecosystem around the site and does not release any radiation, as it does not have any radioactive substance. It measures cosmic rays.
- There is no other neutrino detector anywhere in India at present. ICAL at INO would be the first of its type.

Why are the locals opposing it?

- Locals fear that the excavation and blasts needed to bore the tunnel in the mountains will endanger the biodiversity of the Western Ghats.
- Some of the concerns voiced range from radiation, structural damage to the mountain to emission of hazardous chemicals.

What is a neutrino?

- ▶ Neutrinos are the smallest particles that form the universe.

Who else has a neutrino facility?

- ▶ **Underground:** Canada, Kamioka in Japan and Gran Sasso, Italy
- ▶ **Underwater:** Amundsen-Scott South Pole Station, Antarctica.
- ▶ Antares - under Mediterranean Sea off coast of Toulon, France.

19

BIOMETRIC SEAFARER IDENTITY DOCUMENT

Context:

- India has become the first country in the world to issue Biometric Seafarer Identity Document (BSID), capturing the facial bio-metric data of seafarers.

About:

- The concept of a universal Identification system for the seafarers was mooted in 1950s. Accordingly, International labour Organization (ILO) brought forward the ILO Convention C-108 on seafarers Identity Document. India has ratified this convention in 2015 and issuing a Continuous Discharge Certificate cum Seafarers Identity Document to its seafarers in the form of a booklet.
- The world maritime community had felt the need for a more uniform and robust Identification system for the seafarers consequent to the discussions
- The new facial biometric technology is a marked improvement over the two fingers or iris based bio-metric data, with modern security features.
- It will make the identification of the SID holder more reliable and efficient, while protecting their dignity and privacy.
- This is leading to generation of employment in the sector, which is evident in the growing number of Indian seafarers in the international shipping industry.
- The new document will give a foolproof identification to our seafarers which will facilitate their movement, provide ease of getting jobs and help in identifying them from any location in the world.
- The BSID introduces modern security features. It will have a biometric chip embedded in it. The security of the BSID card is ensured at various levels and through different methods. At the time of data capturing the live face is cross matched through passport photo using a face matching software. The card has two optical security features- Micro prints/micro texts and Unique Guilloche pattern. Software has been developed for capturing the facial biometrics and its authentication through the public key infrastructure.
- A record of each SID issued will be maintained in a national database and its related information will be internationally accessible.
- In India the BSID project has been taken up in collaboration with Centre for Development of Advanced

Computing (CDAC), Mumbai. The Government notified the Merchant Shipping (Seafarers Bio-metric Identification Document) Rules in 2016. The issuance of SID involves the collection of biometric and demographic details of the seafarers, their verification and then issuance of the card to them.

- Nine data collection centers have been setup at Mumbai, Kolkata, Chennai, Noida, Goa, New Mangalore, Kochi, Vizag&Kandla for issue of BSID.

20

INDIA JOINS THE GLOBAL ANTIMICROBIAL RESISTANCE RESEARCH AND DEVELOPMENT HUB

Context:

- India has joined the Global Antimicrobial Resistance (AMR) Research and Development (R&D) Hub as a new member.

Ministry/Agency: Ministry of Science & Technology

About:

- This expands the global partnership working to address challenges and improve coordination and collaboration in global AMR R&D to 16 countries, the European Commission, two philanthropic foundations and four international organisations (as observers).
- The Global AMR R&D Hub was launched in May 2018 in the margins of the 71st session of the World Health Assembly, following a call from G20 Leaders in 2017.
- The Global AMR R&D Hub supports global priority setting and evidence-based decision-making on the allocation of resources for AMR R&D through the identification of gaps, overlaps and potential for cross-sectoral collaboration and leveraging in AMR R&D.
- The operation of the Global AMR R&D Hub is supported through a Secretariat, established in Berlin and currently financed through grants from the German Federal Ministry of Education and Research (BMBF) and the Federal Ministry of Health (BMG).
- From this year onward, India will be the member of Board of members of Global AMR R&D Hub.
- AMR is the ability of a microbe to resist the effects of medication that once could successfully treat the microbe.
- Today, the emergence and spread of antimicrobial resistance continues unabated around the world. Given the important and interdependent human, animal, and environmental dimensions of antimicrobial resistance, India considers it reasonable to explore issues of antimicrobial resistance through the lens of One Health approach which should be supported by long-term commitments from all stakeholders.

21

BRIDGITAL NATION

Context:

- Prime Minister Shri Narendra Modi unveiled the book "Bridgital Nation" and presented its first copy to Shri Ratan Tata

About:

- The book has been written by Shri N Chandrasekaran and Ms. Roopa Purushottam.

- Addressing the gathering, PM lauded the authors for bringing out a visionary book that is replete with positivity and optimism and delves in depth about the importance of technology.
- He added that the book is coming out at a time when technology is positively transforming the lives of millions of Indians.
- Prime Minister stressed on the need to understand that technology is a bridge and not a divider.
- Technology builds bridge between aspirations and achievement, demand and delivery, government and governance in order to achieve 'Sabka Saath, Sabka Vikas'.
- He also emphasized on the need to build bridge between artificial intelligence and human intentions.
- The book presents a powerful vision of the future where technology and human beings co-exist in a mutually beneficial ecosystem. It argues that instead of accepting technology as replacement of human labour, India can use it as an aid to generate more jobs. The cutting edge digital tools can act as a bridge between aspirations and achievements - hence the term 'bridgital'.

22

CSIR CONDUCTS WHOLE GENOME SEQUENCING OF OVER 1,000 INDIANS FOR BIOMEDICAL APPLICATIONS

Context:

- The Council of Scientific & Industrial Research (CSIR) has conducted Whole Genome Sequencing of 1,008 Indians from different populations across the country.

About:

- Whole genome data will be important for building the knowhow, baseline data and indigenous capacity in the emerging area of Precision Medicine.
- The outcomes of the IndiGen will have applications in a number of areas including predictive and preventive medicine with faster and efficient diagnosis of rare genetic diseases.
- The IndiGen initiative was undertaken by CSIR, which was implemented by the CSIR-Institute of Genomics and Integrative Biology (IGIB), Delhi and CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad.
- This has enabled benchmarking the scalability of genome sequencing and computational analysis at population scale in a defined timeline.
- The ability to decode the genetic blueprint of humans through whole genome sequencing will be a major driver for biomedical science.
- The outcomes of the IndiGen will be utilized towards understanding the genetic diversity on a population scale, make available genetic variant frequencies for clinical applications and enable genetic epidemiology of diseases.
- The whole genome data and knowhow for the analysis of largescale genomic data is expected to enable evidence and aid in the development of technologies for clinical and biomedical applications in India.

23

COMMERCIALISING R&D OF ISRO

- A new company by name, "NewSpace India Limited (NSIL)", has been incorporated on 06th March 2019, as a wholly owned Government of India Undertaking / Central Public Sector Enterprise (CPSE), under the administrative control of Department of Space (DOS) to commercially exploit the research and development work of Indian Space Research Organisation (ISRO) Centres and constituent units of DOS.

- The business activities of NSIL are mainly driven towards enabling Indian industries to productionise space systems through technology transfer mechanisms and to exploit the commercial opportunities emanating from the Indian space programme.
- NSIL has commenced its commercial business operations since its incorporation.

24 NATIONAL BROADBAND MISSION

The Government has launched a 'National Broadband Mission that aims to connect 600,000 villages across India at an estimated outlay of Rs 7 lakh crore including a 10% contribution from the state reserve over a period of next 3-4 years.

About NBM:

- The National Broadband Mission (NBM) is a part of the government's ongoing BharatNet initiative.
- The vision of the NBM is to fast track growth of digital communications infrastructure, bridge the digital divide, facilitate digital empowerment and inclusion and provide affordable and universal access of broadband for all.
- The mission has the following major objectives:
 - Broadband access to all villages by 2022
 - Facilitate access to broadband services especially in rural and remote areas
 - Laying of incremental 30 lakhs route km of Optical Fiber Cable and an increase in tower density from 0.42 to 1.0 tower per thousand of the population by 2024
 - Significantly improve the quality of services for mobile and internet
 - Develop innovative implementation models for Right of Way (RoW)
 - Develop a **Broadband Readiness Index (BRI)** to measure the availability of digital communications infrastructure and conducive policy ecosystem within a State/UT.
 - Creation of a **digital fiber map** of the Digital Communications network and infrastructure, including Optical Fiber Cables and Towers, across the country
 - Investment from stakeholders of USD 100 billion (Rs 7 Lakh Crore) including Rs 70,000 crore from Universal Service Obligation Fund (USOF)

BharatNet is an initiative of Government of India to provide broadband services at 100 Mbps to around 2.5 lakh gram panchayats of the country. The initiative was originally started in 2011 as National Optical Fibre Network (NOFN). It was renamed as BharatNet in 2015.

25 THE NATIONAL STOCK EXCHANGE (NSE) KNOWLEDGE HUB:

- The Government has inaugurated the **National Stock Exchange (NSE) Knowledge Hub**, an Artificial Intelligence (AI) powered learning ecosystem that will assist the banking, financial services and insurance (BFSI) sector.
- It is also available on mobile and attempts to bring together world-class content and learners through this state-of-the-art and future-ready platform.

What NSE Knowledge Hub will do?

- **Match-making of behaviour & content:** The NSE Knowledge Hub will curate the content for learners from many internal, external and premium sources for the personalised learning experience.

- **Creating intelligent talents:** The NSE Knowledge Hub will enhance skills and help academic institutions in preparing future-ready talent for the financial service industry.

Role of Artificial Intelligence:

- Artificial intelligence (AI) is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks the typically require human intelligence.
- AI is an interdisciplinary science with multiple approaches, but advancements in machine learning and deep learning are creating a paradigm shift in virtually every sector of the tech industry.
- The use of AI will ensure that the skill up-gradation is affordable and accessible and helps in the creation of a workforce that is adequate for the requirements of the sector.
- AI and Machine Learning will contribute USD 1 trillion by 2035 and this is a good beginning by NSE to tap the potential of AI and use it as a tool to create a workforce in the BFSI sector in India.

26

IVRI RELEASES LIVE ATTENUATED CLASSICAL SWINE FEVER (CSF) CELL CULTURE VACCINE (INDIGENOUS STRAIN):

- The government has released the Live attenuated Classical Swine Fever Vaccine (IVRI-CSF-BS) Technology developed by **ICAR -Indian Veterinary Research Institute (IVRI), Izatnagar**.
- CSF is one of the most important diseases of pigs causing high mortality with an annual loss of approx. Rs.4.299 billion.

About the Vaccine:

- The vaccine is safe, potent, does not revert to virulence and provide protective immunity from day 14 of the vaccination till 24 months studied so far.
- Since the cell culture vaccine is from a foreign strain (Weybridge Strain, UK), IVRI has further developed a new CSF Cell Culture Vaccine by attenuating an indigenous virulent CSF virus in cell culture.
- The vaccine virus has very high titre and lakhs of doses can be produced very easily in cell culture and country's requirement can be easily fulfilled using this new vaccine.
- To address the need for building shared, professionally managed and strong Science and Technology infrastructure in the country, the Department of Science & Technology has launched a unique scheme called "Sophisticated Analytical & Technical Help Institutes (SATHI)".
- These Centres are expected to house major analytical instruments to provide common services of high-end analytical testing, thus avoiding duplication and reduced dependency on foreign sources.
- These would be operated with a transparent, open access policy.
- DST has already set up three such centres in the country, one each at IIT Kharagpur, IIT Delhi and BHU at a total cost of Rs 375 Cores. It is planned to set up five SATHI Centres every year for the next four years.

27

SCIENCE AND APPLIED RESEARCH ALLIANCE AND SUPPORT (SARAS)

- Coal India's flagship subsidiary NCL has set up a centre named "Science and Applied Research Alliance and Support"(SARAS) to promote Innovation, Research & Development and skill development along with improving company's operational efficiency and utilize resources at an optimum level.
- The centre will help and enable the company in Integration of Innovation and Research for enhancing coal production, productivity, and safety in mines.

- Besides, the SARAS would also help establish centres of excellence to ensure technical support to R&D along with thrust on quality skill development and employment to local youths in and around company's operational area.

28 EMPOWERED "TECHNOLOGY GROUP"

- Cabinet has approved constitution of a 12-Member Technology Group with the Principal Scientific Adviser to Government of India as its Chair.
- This Group is mandated to render timely policy advice on latest technologies; mapping of technology and technology products; commercialisation of dual use technologies developed in national laboratories and government R&D organisations; developing an indigenisation road map for selected key technologies; and selection of appropriate R&D programs leading to technology development.
- The Technology Group intends to ensure :-
 - That India has appropriate policies and strategies for effective, secure and context-sensitive exploitation of the latest technologies for economic growth and sustainable development of Indian Industry, in all sectors;
 - To advise the Government on priorities and strategies for research on emerging technologies across sectors;
 - To maintain an updated map of technology and technology products available, and being developed, across India;
 - To develop indigenization roadmap for selected key technologies;
 - To advise the Government on its technology supplier and procurement strategy;
 - To encourage all Ministries and Departments as well as State Governments to develop in-house expertise in policy and use aspects of emerging technologies such as data science and artificial intelligence, and to this end develop an approach to training and capacity building
 - To formulate policies for sustainability of public sector technology at PSUs/Labs while encouraging cross-sector collaborations and research alliances with Universities and Private Companies; and
 - To formulate standards and common vocabulary to apply in vetting of proposals for R&D.

29 5G HACKATHON

- 5G technology provides quantum leap over 4G in terms of speed, peak data rate, latency, spectrum efficiency and connection density.
- Most distinct feature is applications in different economic verticals.
- 5G Hackathon will convert innovating ideas in to products and solutions in different verticals and develop India specific Use cases around 5G.
- Various phases of the Hackathon broadly include preliminary submission of ideas, selection of 100 best ideas, mentorship and support from the Hackathon partners, development of solutions/products, selection and testing of 30 best solutions/ products on 5G trial network followed by felicitation of the 3 best ideas during India Mobile Congress (IMC), 2020.
- Participants can develop 5G solutions from across 10 categories including Healthcare, Education & Governance, AgriTech & Livestock, Environment, Public Safety & Disaster Management Enterprise, Smart Cities & Infrastructure, Cyber Security, Banking, Finance & Insurance, Logistics & Transportation, Multimedia & Broadcast, among others.
- The 5G Hackathon is open to developers, students, start-ups, SMEs, academic institutions & registered companies in India & NRIs.

- Stakeholders can participate as individuals or as a team to present use cases for the 5G network in the Indian context.

30 NATIONAL SCIENCE DAY 2020

- The Raman Effect won scientist Sir CV Raman the Nobel Prize for physics in 1930.
- It was also designated as an International Historic Chemical Landmark jointly by the American Chemical Society (ACS) and the Indian Association for the Cultivation of Science (IACS).
- The theme of this year's science day is "Women in Science".
- National Science Day is an occasion to salute the talent and tenacity of our scientists. Their innovative zeal and pioneering research has helped India and the world.
- In 1928, Raman discovered that when a stream of light passes through a liquid, a fraction of the light scattered by the liquid is of a different colour.
- Raman conducted his Nobel-prize winning research at IACS, Calcutta.
- While he was educated entirely in India, Raman travelled to London for the first time in 1921, where his reputation in the study of optics and acoustics was known to physicists such as JJ Thomson and Lord Rutherford.
- A commemorative booklet prepared jointly by IACS and ACS on Raman mentions that his speciality was the study of vibrations and sounds of stringed instruments such as the Indian veena and tambura, and Indian percussion instruments such as the tabla and mridangam.
- Significantly, it notes that the Raman Effect is "very weak" — this is because when the object in question is small (smaller than a few nanometres), the light will pass through it undisturbed.
- But a few times in a billion, light waves may interact with the particle. This could also explain why it was not discovered before.
- In general, when light interacts with an object, it can be reflected, refracted or transmitted.
- One of the things that scientists look at when light is scattered is if the particle it interacts with is able to change its energy.
- The Raman Effect is when the change in the energy of the light is affected by the vibrations of the molecule or material under observation, leading to a change in its wavelength.

31

NEW TEST WITH QUANTUM COINS & COMPUTERS FOR QUANTUM SENSING

Researchers from Raman Research Institute (RRI), have devised a new test for fairness of quantum coin or 'qubit' (the basic unit of information in a quantum computer) using entanglement theory.

What is Entanglement?

- The new test uses entanglement to test the fairness of the quantum coin.
- Entanglement is a special type of correlation that exists in the quantum world with no classical counterpart. The researchers from RRI made use of this quantum resource to arrive at a test for fairness of a quantum coin (a qubit).

Significance:

- This is a significant contribution to quantum state discrimination, an essential aspect of quantum information science which is expected to influence quantum sensing.
- Their strategy, which makes use of entanglement, enables better discrimination between quantum states. Such an advantage is valuable in quantum sensors.

32**ARCI SCIENTISTS DEVELOP FRICTION-REDUCING NANOCOMPOSITE COATINGS TO INCREASE DEVICE LIFE**

- A group of scientists at the International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI) have developed a process for size-selective deposition of nanocomposite coatings which can reduce friction of these dynamic systems.

What scientists have found?

- The scientists have found that **nickel tungsten-based coatings** with impregnation of particular sized **Silicon Carbide (SiC)** submicron particles using an economical and straightforward pulsed electroplating or electrodeposition process can provide an excellent combination of wear and corrosion resistance with the low friction coefficient and good oil retention capacity.
- The coatings developed by the ARCI group reduced friction more and could withstand corrosion due to salt spray better than many similar wear-resistant coatings available in the market.
- The coating could address the emerging need for coatings with low friction and wear.
- Nanocomposite coatings with hard particles inside a tough matrix result in the best combination of wear resistance and reduced friction.
- However, the size of reinforcement particles is a critical factor in deciding the friction characteristics.
- Too much variation in the size of reinforcement particles in composite coating results in premature failure of the coating due to stress concentration.

What is Electrodeposition?

- Electrodeposition also called as electroplating, involves the metal parts to be immersed in an electrolyte bath solution, in this case, typically prepared by dissolving crystals of Nickel (Ni) and Tungsten (W) salts in a mix of distilled water and other additives.
- A direct current (DC) was passed through the solution, and the resulting reaction left a deposit of Ni-W alloy on the piece being plated.
- During electrodeposition, a diffusion layer was formed at the cathode surface due to movement and deposition of metallic ions in solution.
- For size-selective electrodeposition, pulse current (PC) electrodeposition – intermittent application of current was used in place of conventional direct current (DC) deposition.
- Pulsed currents of certain amplitude and duration helped in depositing coatings of desired properties, which would not be possible with conventional DC plating.

33**STARCH-BASED MATERIALS DEVELOPED TO STOP RAPID BLOOD LOSS DURING ACCIDENTS**

- Scientists from the Institute of Nano Science and Technology (INST) have developed a starch-based 'hemostat' material that concentrates the natural clotting factors in blood by physically absorbing excess fluid.

- The biodegradable microparticles that combine to form a gel on a wound offer significant improvements over existing alternatives.
- The product has increased absorption capacity, improved absorption, inexpensive, biocompatible as well as biodegradable.
- Hemostat materials absorb excel fluid by concentrating the natural clotting factors in the blood that are critical for stopping the blood flow; however, the bleeding can restart when non-biodegradable materials are removed.
- By chemically modifying natural starch to form microparticles, the team has combined the advantages of biocompatibility and biodegradability with a five- to ten-fold increase in fluid absorption and much-improved adhesion.
- When the microparticles combine, they create an adherent gel that can remain on the wound until slowly dissipating as healing proceeds.

34 TECH FOR TRIBALS

- TRIFED has launched transformational “Tech For Tribals” program in partnership with Institutes of National Importance (INIs) to develop Tribal entrepreneurship
- Tech for Tribals, an initiative of TRIFED supported by Ministry of MSME, aims at capacity building and imparting entrepreneurship skills tottribal forest produce gatherers enrolled under the Pradhan Mantri VanDhan Yojana(PMVDY).
- The trainees will undergo a 30 days program over six weeks comprising 120 sessions.
- The Tech for tribals capacity building program will ensure higher success rate of the Tribal Entrepreneurs by enabling and empowering them to run their business with marketable products with quality certifications.

35 HUNTINGTON DISEASE (HD)

- A team of scientists from National Centre for Cell Science (NCCS) in Pune led by Dr. Amitabha Majumdar have been working to gain insights into this by studying the HTT gene in fruit flies.
- They observed that the pathogenic Huntingtin protein causes a decrease in the overall protein production in cells and that the Huntingtin clumps collect together (sequester) molecules of another protein called Orb2, which is involved in the process of protein formation.

What is Huntington Disease?

- Huntington disease (HD) is a progressive genetic disorder affecting the brain that causes uncontrolled movements, impaired coordination of balance and movement, a decline in cognitive abilities, difficulty in concentrating and memory lapses, mood swings and personality changes.
- It is caused by a mutation in a gene called HTT.
- The HTT genes are involved in the production of a protein called huntingtin. They provide the instruction for making the protein.
- When the genes mutate, they provide faulty instructions leading to production of abnormal huntingtin proteins and these form into clumps.
- The clumps disrupt the normal functioning of the brain cells, which eventually leads to death of neurons in the brain, resulting in Huntington disease.

About Orb2:

- Huntingtin clumps collect together (sequester) molecules of another protein called Orb2, which is involved in the process of protein formation.
- Orb2 protein is also crucial for maintenance of memory in fruit flies. Therefore, sequestration of Orb2 by Huntingtin clumps may hold relevance to the memory-related issues associated with HD as well.

36**SCIENTISTS OF ARI, PUNE DEVELOP BIOFORTIFIED, HIGH PROTEIN WHEAT VARIETY**

- Scientists from Agharkar Research Institute (ARI), Pune have developed a biofortified durum wheat variety MACS 4028, which shows high protein content.

About MACS 4028:

- The wheat variety shown high protein content of about 14.7%, better nutritional quality having zinc 40.3 ppm, and iron content of 40.3ppm and 46.1ppm respectively, good milling quality and overall acceptability.
- MACS 4028, the development of which was published in the Indian Journal of Genetics and Plant Breeding, is a semi-dwarf variety, which matures in 102 days and has shown the superior and stable yielding ability of 19.3 quintals per hectare.
- It is resistant to stem rust, leaf rust, foliar aphids, root aphids, and brown wheat mite.

SPACE**1****GEOSYNCHRONOUS SATELLITE LAUNCH VEHICLE (GSLV)****Context:**

- The Union Cabinet, chaired by the Prime Minister has approved ongoing GSLV continuation programme Phase-4 consisting of five GSLV flights during the period 2021-2024.

About:

- The GSLV Programme - Phase 4 will enable the launch of 2 tonne class of satellites for Geo-imaging, Navigation, Data Relay Communication and Space Sciences.
- The GSLV Continuation Programme - Phase 4 will meet the launch requirement of satellites for providing critical Satellite Navigation Services, Data Relay Communication for supporting the Indian Human spaceflight programme and the next interplanetary mission to Mars. This will also ensure the continuity of production in Indian industry.

Implementation Strategy and targets:

- The GSLV Continuation Programme - Phase 4 will meet the demand for the launch of satellites at a frequency up to two launches per year, with maximal participation by the Indian industry. All the operational flights would be completed during the period 2021-24.

Major impact:

- The operationalization of GSLV has made the country self-reliant in the launching capability of 2 tonne class of satellites for communication & meteorological satellites.
- The GSLV Continuation Programme will sustain & strengthen the capability and self-reliance in the launching of similar satellites for national requirements including next generation navigation satellites, data relay communication satellites and interplanetary missions.

Background:

- GSLV has enabled independent access to space for 2 tonne class of satellites to Geosynchronous Transfer Orbit (GTO). One of the very significant outcomes of the GSLV Continuation Programme is the mastering of the highly complex cryogenic propulsion technology, which is an essential technological capability to launch communication satellites to GTO. This has also paved the way for the development of a high thrust Cryogenic engine & stage for the next generation launch vehicle i.e. GSLV Mk-III.
- With the recent successful launch of GSLV-F11 on 19th December 2018, GSLV has successfully orbited 10 national satellites. GSLV with the indigenous Cryogenic Upper Stage has established itself as a reliable launch vehicle for communication, navigation and meteorological satellites and also to undertake future interplanetary missions.
- GSLV Continuation Programme was initially sanctioned in 2003, and two phases have been completed and the third phase is in progress and expected to be completed by Q4 of 2020-21.

GSLV Mk-III:

- ▶ The Geosynchronous Satellite Launch Vehicle Mark III is the next generation launch vehicle of ISRO which will be capable of launching four-tonne class satellites into Geosynchronous Transfer Orbit (GTO).
- ▶ It has an indigenous cryogenic third stage, designated as C25.
- ▶ The C25 stage is considered as the most powerful upper stage developed by ISRO which uses Liquid Oxygen (LOX) and Liquid Hydrogen (LH2) propellant combination.

2

EMISAT

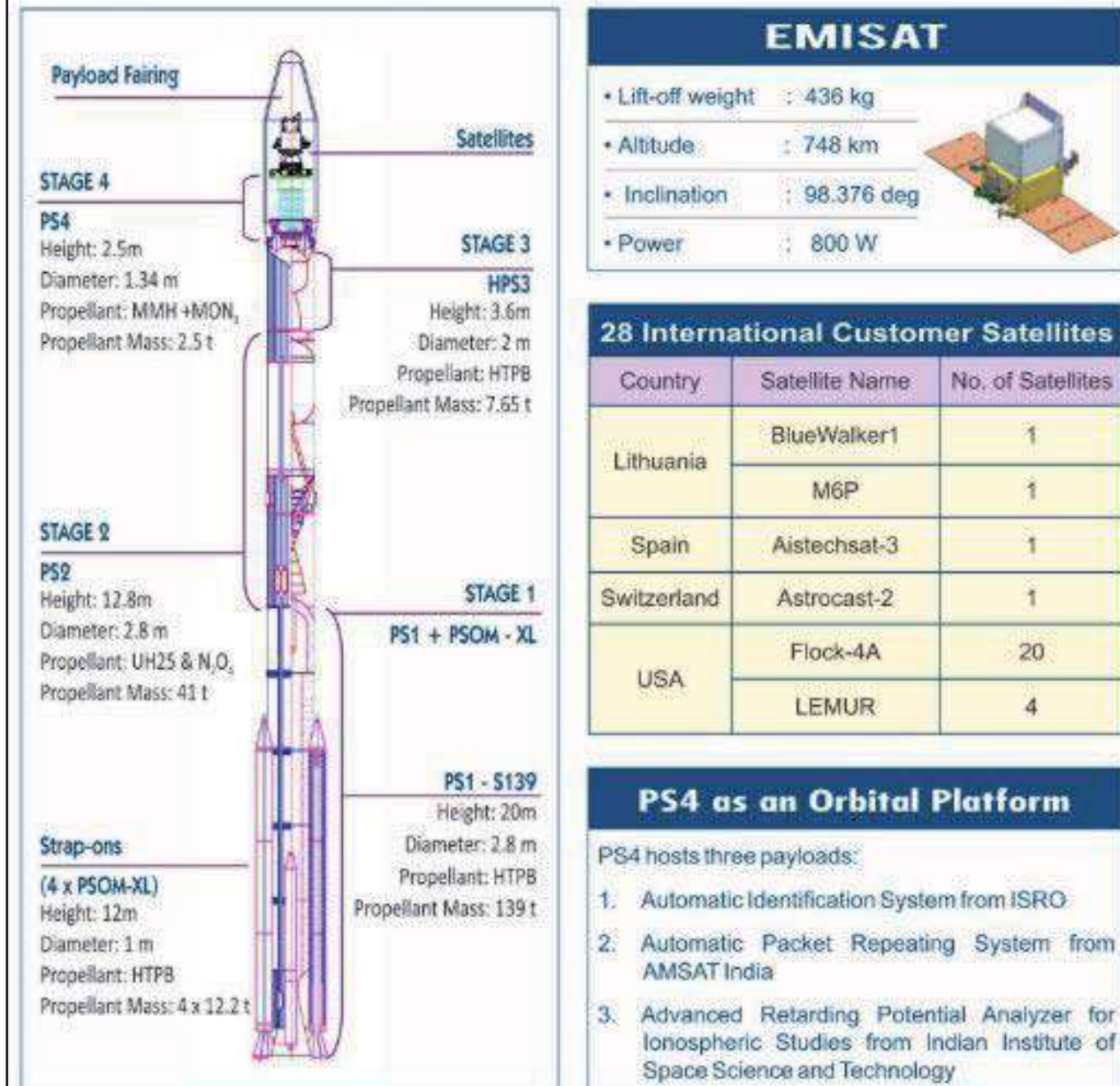
Context:

- Indian space agency, Indian Space Research Organization (ISRO) on April 1, 2019 launched the electronic intelligence satellite EMISAT along with 28 other satellites of global customers.

About:

- These 28 satellites, together weighing about 220 kg, belong to Spain (1), Lithuania (2), Switzerland (1) and the United States (24). These include 20 Flock-4A satellites and 4 Lemur satellites.
- Emisat was launched into an altitude of 749 km orbit, while the 28 satellites were launched at an altitude of 504 km orbit.
- The satellites were launched aboard the PSLV-C45 from Satish Dhawan Space Center in Sriharikota, Andhra Pradesh.
- This was the 47th mission for ISRO's Polar Satellite Launch Vehicle (PSLV) Programme and was the 71st launch vehicle mission from Sriharikota.
- For the first time, ISRO invited common people to view the launch.
- With this, India became the 4th largest space power in the world. Till now, only three countries in the world – United States of America, Russia and China have achieved this.

- PSLV-C45 is the 47th flight of the Polar Satellite Launch Vehicle (PSLV)
- 1st flight of its QL variant (with 4 strap-ons)



EMISAT:

- EMISAT is meant for electromagnetic spectrum measurements. It will be released into an orbit at 749 km.
- EMISAT is primarily based on the famous Israeli spy satellite called SARAL or (Satellite with ARGOS and ALtika), and inherits its SSB-2 bus protocol for conducting sharp electronic surveillance across the length and breadth of India.
- The satellite would serve as the country's roving device for detecting and gathering electronic intelligence from enemy radars across the borders as it circles the globe roughly pole to pole every 90 minutes or so.

3

UNNATI

Context:

- Recently, ISRO'S UNNATI-- Unispace Nanosatellite Assembly & Training programme has been inaugurated in Bengaluru.

About:

- UNNATI, a capacity building programme on Nanosatellite development, is an initiative by ISRO to commemorate the 50th anniversary of the first United Nations conference on the exploration and peaceful uses of outer space (UNISPACE-50).
- The programme provides opportunities to the participating developing countries to strengthen in assembling, integrating and testing of Nanosatellite.
- UNNATI programme is planned to be conducted for 3 years by U.R. Rao Satellite Centre of ISRO in 3 batches and will target to benefit officials of 45 countries.

Nanosatellites

- ▶ The term "nanosatellite" or "nanosat" is applied to an artificial satellite with a wet mass between 1 and 10 kg.
- ▶ Designs and proposed designs of these types may be launched individually, or they may have multiple nanosatellites working together or in formation, in which case, sometimes the term "satellite swarm" or "fractionated spacecraft" may be applied.
- ▶ Some designs require a larger "mother" satellite for communication with ground controllers or for launching and docking with nanosatellites.
- ▶ With continued advances in the miniaturization and capability increase of electronic technology and the use of satellite constellations, nanosatellites are increasingly capable of performing commercial missions that previously required microsatellites.
- ▶ Additionally, the nanosat option would allow more nations to own their own satellite for off-peak (non-disaster) imaging data collection. As costs lower and production times shorten, nanosatellites are becoming increasingly feasible ventures for companies.

4

YOUNG SCIENTIST PROGRAMME

Context:

- Indian Space Research Organisation launched a special programme for school children called "Young Scientist Programme" "Yuva Vigyani Karyakram".

About:

- The Program is primarily aimed at imparting basic knowledge on Space Technology, Space Science and Space Applications to the younger ones with the intent of arousing their interest in the emerging areas of Space activities.
- ISRO has chalked out this programme to "Catch them young".
- The residential training programme will be of around two weeks duration during summer holidays and it is proposed to select 3 students each from each State/ Union Territory to participate in this programme every year covering CBSE, ICSE and State syllabus.

- Those who have finished 8th standard and currently studying in 9th standard will be eligible for the programme.
- The selection is based on the academic performance and extracurricular activities, which is clearly mentioned in the selection criteria already circulated to Chief Secretaries of States/ Administrators of UTs.
- Students belong to the rural area have been given special weightage in the selection criteria.

Indian Space Research Organisation (ISRO)

- It was formed in **1969**, headquartered in the city of **Bengaluru**.
- ISRO superseded the erstwhile **Indian National Committee for Space Research (INCOSPAR)** established in 1962.
- It is managed by the Department of Space, which **reports to the Prime Minister of India**.
- It built India's first satellite, **Aryabhata**, which was launched by the Soviet Union on 19 April **1975**.

5

RISAT-2B

Context:

- India's Polar Satellite Launch Vehicle (PSLV-C46) successfully launched the RISAT-2B satellite from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota in Andhra Pradesh.

About:

- This was the 72nd launch vehicle mission from SDSC SHAR, Sriharikota and 36th launch from the First Launch pad.
- PSLV-C46 lifted-off from the First Launch Pad and injected RISAT-2B into a orbit of 556 km. After separation, solar arrays of RISAT-2B were deployed automatically and ISRO Telemetry Tracking and Command Network (ISTRAC) at Bengaluru assumed control of the satellite.
- RISAT-2B is a radar imaging earth observation satellite weighing about 615 kg. The satellite is intended to provide services in the field of Agriculture, Forestry and Disaster Management.
- It is an improvement over the remote sensing satellites in natural resources observation and management. The ISRO, through the National Remote Sensing Centre (NRSC), Hyderabad, has been harnessing the imagery from remote sensing satellites and providing important data for planning and utilisation of natural resources over the past three decades.

RISAT (Radar Imaging Satellite):

- RISAT is a series of Indian radar imaging reconnaissance satellites built by ISRO. They provide all-weather surveillance using synthetic aperture radars (SAR).
- The RISAT series are the first all-weather earth observation satellites from ISRO. Previous Indian observation satellites relied primarily on optical and spectral sensors which were hampered by cloud cover.
- After the November 26, 2008 Mumbai attacks, the launch plan was modified to launch RISAT-2 before RISAT-1, since the indigenous C-band SAR to be used for RISAT-1 was not ready. RISAT-2 used an Israel Aerospace Industries (IAI) X-band SAR sensor similar to the one employed on TecSAR.

6 STATUS OF TECHNOLOGY HUBS

Context:

- **Department of Science and Technology** has been implementing **Technology Development Programmes (TDP)** to facilitate conversion of proof-of-concepts for into advance prototypes for validation and demonstration.

About:

■ Technology Development Programmes (TDP) objectives:

- Support R&D for development of innovative technologies in identified areas.
- Promote application of advanced technology for improving the performance and value addition to existing technology.
- Capacity building in the area of technology development in terms of human resource and infrastructure.

■ Sub Schemes of TDP:

- Advanced Manufacturing Technologies (AMT) aligning to Make in India
- Biomedical Device and Technology Development Program (BDTD) aligning to Swasth Bharat
- Device Development Program (DDP) aligning to Make in India
- Science and Heritage Research Initiative (SHRI)
- Technology Development Program (TDP) aligning to Make in India
- Technology Mission for Indian Railways (TMIR) aligning to Make in India
- Waste Management Technologies (WMT) aligning to Swachh Bharat and Smart City

7 CREATION OF GAGANYAAN NATIONAL ADVISORY COUNCIL

Context:

- A Gaganyaan National Advisory Council has been created with members from different institutions and industries

Gaganyaan:

- It is an Indian crewed orbital spacecraft intended to be the basis of the Indian Human Spaceflight Programme.
- The spacecraft is being designed to carry three people, and a planned upgraded version will be equipped with rendezvous and docking capability.
- In its maiden crewed mission, Indian Space Research Organisation's largely autonomous 3.7-tonne capsule will orbit the Earth at 400 km altitude for up to seven days with a three-person crew on board.
- The crewed vehicle is planned to be launched on ISRO's GSLV Mk III in December 2021.

8

CHANDRAYAAN-2 SPACECRAFT

Context:

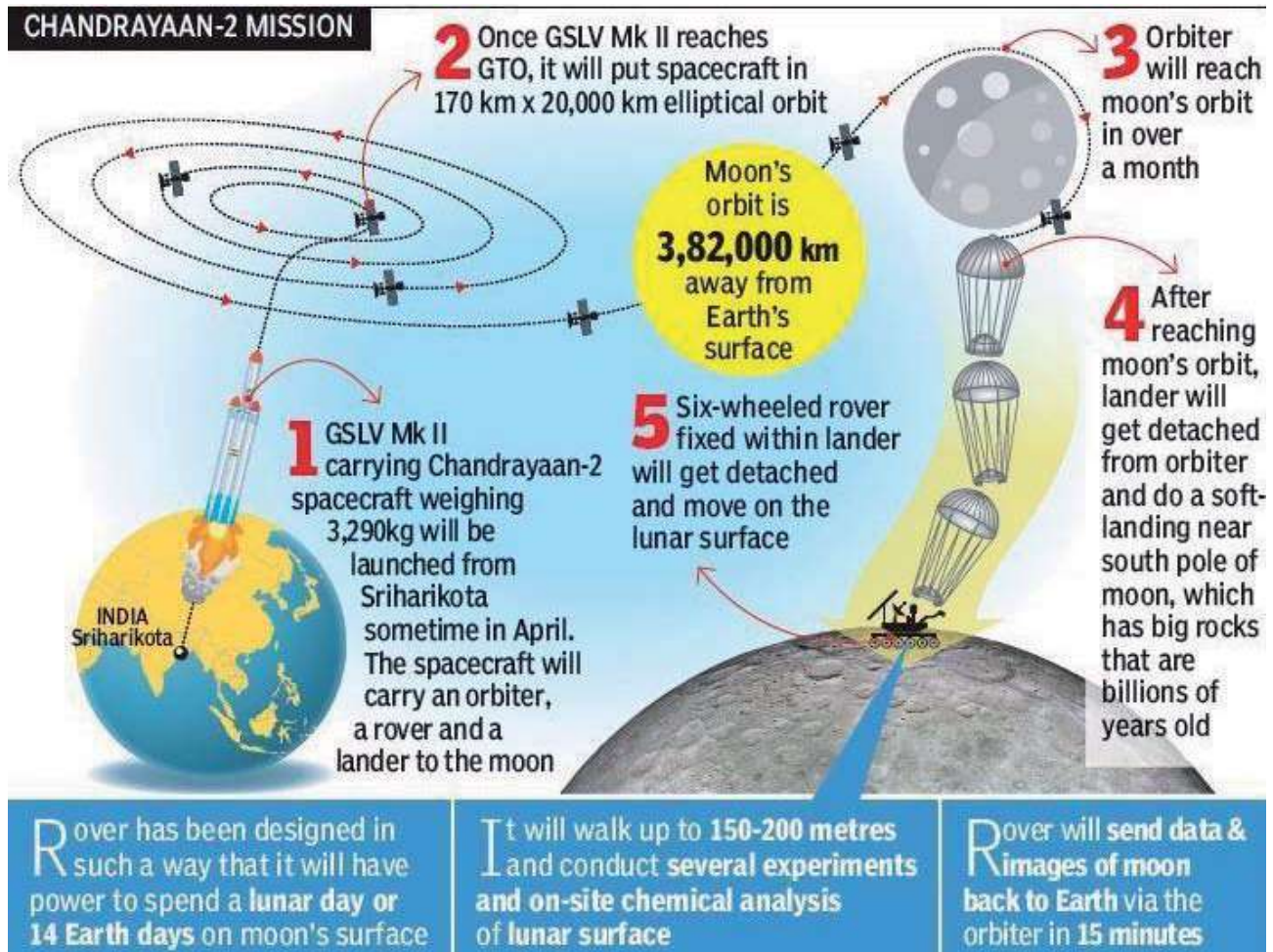
- India's Geosynchronous Satellite Launch Vehicle GSLV MkIII-M1 successfully launched the 3840 kg Chandrayaan-2 spacecraft into an earth orbit.

About:

- Chandrayaan-2 is India's first lander mission.
- It consists of an Orbiter, Lander and Rover, all equipped with scientific instruments to study the moon.
- The Lander and Rover modules will separate from the orbiter and make a soft-landing on moon's surface.
- The lander and rover are designed to work for only 14 days (1 lunar day) while the orbiter would remain in orbit for a year.

Orbiter:

- The Orbiter would once again watch the moon from a 100-km orbit.
- The Orbiter is a 2379-kg spacecraft with 7 instruments on board.
- It is equipped with different kinds of cameras to take high-resolution three-dimensional maps of the surface.



- It also has instruments to study the mineral composition on the moon and the lunar atmosphere, and to assess the abundance of water.
- The Orbiter will observe lunar surface and relay communication between Earth and the Lander.

Lander:

- ISRO has named the Lander module as Vikram, after Vikram Sarabhai, the pioneer of India's space programme.
- The 1471-kg lander will remain stationary after touching down on the moon's surface.
- It will carry three instruments that will mainly study the moon's atmosphere.
- One of the instruments will also look out for seismic activity on lunar surface.

Rover:

- The Rover is a 6-wheeled, Artificial Intelligence-powered and solar-powered vehicle named Pragyan, meaning wisdom.
- Once on the moon, the rover will detach itself from the lander.
- Equipped with two instruments, it would slowly crawl on the surface, making observations and collecting data.
- Its primary objective is to study the composition of the moon's surface near the landing site.
- It would also determine the abundance of different elements on the moon's surface.

Significance of Chandrayan-2:

- With Chandrayaan-2, India will become only the 4th country in the world to land a spacecraft on the moon. So far, all landings, human as well as non-human, on the moon have been in areas close to its equator.
- This was mainly because this area receives more sunlight that is required by the solar-powered instruments to function.
- Chandrayaan-2 will make a landing at a site where no earlier mission has gone, near the South Pole of the moon.
- It is a completely unexplored territory and therefore offers great scientific opportunity for the mission to discover something new.

South Pole:

- The south pole of the moon holds the possibility of the presence of water.
- This is one aspect that would be probed meticulously by Chandrayaan-2.
- In addition, this area is also supposed to have ancient rocks and craters.
- It can thus offer indications of history of moon, and also contain clues to the fossil records of early solar system.

Chandrayaan-1 mission:

- ▶ Chandrayaan-1 was the first Indian lunar probe under Chandrayaan program. It was launched by the Indian Space Research Organisation in October 2008, and operated until August 2009.
- ▶ The mission included a lunar orbiter and an impactor.
- ▶ India launched the spacecraft using a PSLV-XL rocket, serial number on 22 October 2008.
- ▶ After almost a year, the orbiter started suffering from several technical issues including failure of the star sensors and poor thermal shielding;

- ▶ Chandrayaan stopped sending radio signals about on 28 August 2009, shortly after which the ISRO officially declared the mission over.
- ▶ Chandrayaan operated for 312 days as opposed to the intended two years but the mission achieved 95% of its planned objectives.

9

CARTOSAT-3

- The national space agency ISRO launched the latest Earth observation satellite, Cartosat-3 successfully
- The workhorse rocket **PSLV in its C-47 version** carried it along with 13 other customer payloads into the intended polar sun-synchronous orbit.
- It was launched from the second launch pad of the Satish Dhawan Space Centre at Sriharikota in Andhra Pradesh. **Cartosat-3 was injected at a height of 509 kilometres** from the surface of the earth.
- For the PSLV, this is the **49th flight overall**.
- This mission is the **74th launch mission for the ISRO from Sriharikota**.
- In total, **Cartosat-3 is the ninth satellite of its class** and is the first in the series of the third generation payloads. **Cartosat-3 weighs a little over 1.6 ton** and has the capacity to generate 2000 MW power, **using its solar panels**. Its **operational life is five years**.
- The 13 customer satellites have been launched under a commercial agreement with the New Space India Limited, the commercial arm of the ISRO. Twelve of them known as the **FLOCK-4P** are meant for Earth observation and the last one called **MESHBED** is intended to serve as a testbed.

10

PSLV SUCCESSFULLY LAUNCHES RISAT-2BR1 AND NINE COMMERCIAL SATELLITES IN ITS FIFTIETH FLIGHT

- India's Polar Satellite Launch Vehicle, in its fiftieth flight (PSLV-C48), successfully launched RISAT-2BR1 along with nine commercial satellites from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota.
- PSLV-C48 lifted-off at 1525 Hrs (IST) from the First Launch Pad. After 16 minutes and 23 seconds, RISAT-2BR1 was successfully injected into an orbit of 576 km. Subsequently, nine commercial satellites were injected into their intended orbits. After separation, the two solar arrays of RISAT-2BR1 were deployed automatically and the ISRO Telemetry Tracking and Command Network at Bengaluru assumed control of the satellite.
- ISRO has achieved an important milestone in the history of PSLV by successfully launching its 50th mission.
- RISAT-2BR1 is a radar imaging earth observation satellite weighing about 628 kg. The satellite will provide services in the field of Agriculture, Forestry and Disaster Management. The mission life of RISAT-2BR1 is 5 years.

11

ISRO AND DRDO INK MOUS FOR HUMAN SPACE MISSION**Context:**

- ISRO and DRDO Ink MoUs to provide technologies for human centric systems for Human Space Mission

- Indian Space Research Organisation (ISRO) has joined hands with Defence Research and Development Organisation (DRDO) for development of human centric systems for the Human Space Mission to demonstrate its human space flight capabilities.
- The MoUs were signed by Directors of Aerial Delivery Research & Development Establishment (ADRDE), Defence Food Research Laboratory (DFRL), Defence Bio-Engineering & Electro Medical Laboratory (DEBEL), Defence Laboratory (DL) Jodhpur, Centre for Fire, Explosive & Environment Safety (CFEES), Defence Institute of Physiology & Allied Sciences (DIPAS) and Institute of Nuclear Medicine & Allied Sciences (INMAS) in the presence of Secretary, Department of Defence R&D and Chairman DRDO, Dr G Satheesh Reddy and Scientist & Director General (Life Sciences), Dr A K Singh.
- the technological capabilities existing in DRDO laboratories for defence applications will be customised to meet the requirements of the human space mission of ISRO. Some of the critical technologies to be provided by DRDO to ISRO include space food, space crew health monitoring and emergency survival kit, radiation measurement and protection, parachutes for safe recovery of crew module and others.
- DRDO is committed to provide all necessary support to ISRO for the human space flight and customisation of the required technologies has already been initiated to meet the stringent timelines. ISRO aims to demonstrate human spaceflight capability before the 75th anniversary of India's independence in 2022.

DEFENCE

1

AKASH – MK -1S

Context:

- Defence Research and Development Organisation (DRDO) has successfully test fired AKASH-MK-1S missile from ITR, Chandipur, Odhisa on 25 and 27 May 2019.

About:

- Akash Mk1S is an upgrade of existing AKASH missile with indigenous Seeker.
- It is a surface to air missile which can neutralize advanced aerial targets.
- The Akash weapon system has combination of both command guidance and active terminal seeker guidance.
- Seeker and guidance performance have been consistently established in both the missions. All the mission objectives have been met.

Akash Missile System

- ▶ Indigenously developed by DRDO under the Integrated Guided-Missile Development Programme (IGMDP).
- ▶ It is mid-range surface-to-air anti-aircraft missile. The missile system can target aircraft up to 30 km away, at altitudes up to 18,000 m.
- ▶ Supersonic speeds ranging from Mach 2.8 to 3.5.
- ▶ Nuclear capable.
- ▶ It is multi target, multi directional, and all weather air-defence system consisting of surveillance and tracking radars. It has the capability to "neutralise aerial targets like fighter jets, cruise missiles and air-to-surface missiles" as well as ballistic missiles. It is in operational service with the Indian Army and the Indian Air Force.
- ▶ Akash is powered by Ramjet-rocket propulsion system.

2

GUIDED PINAKA**Context:**

- Guided Pinaka developed by Defence Research and Development Organisation (DRDO) was successfully test fired at Pokhran ranges after two successful trials.

About:

- The consecutive successful missions of Guided Pinaka prove the efficacy, reliability and high precision capabilities of the weapon system.
- The weapon system is equipped with state-of-the-art guidance kit comprising of an advanced navigation and control system.
- In all the missions, the weapon systems impacted the intended targets with high precision and achieved desired accuracies.
- Telemetry Systems tracked and monitored the vehicle all through the flight path. All the mission objectives have been met.
- The indigenously developed Guided Pinaka by DRDO will significantly boost the capability of the artillery to make precision hits.

3

CHINOOK HEAVY-LIFT HELICOPTERS**Context:**

- The Indian Air Force has formally inducted four US-made Chinook heavy-lift helicopters at Chandigarh's Air Force Station 12 Wing.

About:

- The India specific CH- 47F (I) is a heavy lift, tandem rotor helicopter which currently serves the armed forces of 19 countries.
- The aircraft is all-weather capable and state-of-the-art night vision goggles will permit all operations even at night.
- This massive helicopter can carry 9.6 tons of cargo, including heavy machinery, artillery guns and even light armoured vehicles to high altitude.
- The helicopter is expected to greatly enhance India's capabilities across a range of military & HADR missions.
- Our country faces a multitude of security challenges and we require a vertical-airlift capability for a much diversified terrain. The Chinook will give the IAF a quantum leap to transport cargo to precarious high-altitude locations.
- Although we have been operating the medium lift Mi-17 and heavy lift Mi-26 helicopters, the Chinook, with its operating ceiling of 20,000 feet, will redefine heli-lift not only in operations like inter-valley transport of troops, airlifting artillery guns and heavy under slung loads for the Border Roads Organisation, but also for humanitarian assistance and disaster relief to far-flung crisis hit areas.
- While the original Chinook first flew in 1962, it has undergone several upgrades and is now one of the most modern heavy lift choppers in the world.
- Its missions range from ferrying troops to disaster relief operations.

4 INS KOHASSA

Context:

- Naval Air Station (NAS) Shibpur was commissioned as INS Kohassa by Admiral Sunil Lanba.

About:

- INS Kohassa has been named after a White-Bellied Sea Eagle, which is a large bird of prey, endemic to Andaman and Nicobar Islands.
- NAS Shibpur was established in 2001 as a Forward Operating Air Base (FOAB) for enhanced surveillance in North Andaman.
- The close proximity of Coco Islands (Myanmar) and wide expanse of Indian Exclusive Economic Zone (EEZ) makes the base a very vital asset
- NAS Shibpur was identified by NITI Aayog as one of the 'Early Bird' project as part of holistic island development. Towards this, IN has been ready in all respects to facilitate civil flight operations from NAS Shibpur.

5 QUICK REACTION SURFACE-TO-AIR MISSILE (QRSAM)

Context:

- The Defence Research and Development Organisation (DRDO) test-fired two missiles from a test facility at Chandipur in Balasore district.

About:

- Defence Research and Development Organisation (DRDO) successfully test fired indigenously developed Quick Reach Surface-to-Air missiles (QRSAM) from ITR Chandipur, off the Odisha Coast. The two missiles were tested for different altitude and conditions. The test flights successfully demonstrated the robust Control, Aerodynamics, Propulsion, Structural performance and high manoeuvring capabilities thus proving the design configuration.
- The first test firing of the Quick Reaction Surface-to-Air Missile took place on June 4, 2017 and this was followed by the second successful test on July 3.
- The missiles were fired from a canister mounted on a rotatable truck-based launch unit.
- QRSAM uses solid-fuel propellant and has a range of 25-30 km, is capable of killing aerial targets, tanks and bunkers.
- The missile is an all-weather, all-terrain missile with electronic counter measures against jamming by aircraft radars.

Missile	Type, Details	From To	Range	Weight (1Ton = 1000 kg)	Warhead	Status
Agni VI	ICBM, 4 stage	Surface to Surface	12000 Km	70 T	3 T	Development stage
K4	SLBM (Submarine launched ballistic missile)	Under water to surface	3500 Km	17 T	2 T	In Development
Nirbhay	Stealth, subsonic, Cruise	Land, Naval, Air Sea to	1000 Km	1 T	100 Kg	In Production stage
Dhanush	Naval variant of Prithvi II	Sea/Surface	350 Km	4.6 T	0.5 T	In service
Prithvi II	SRBM	Surface to Surface	350 Km	4.6 T	0.5 T	In service
Prithvi III	SRBM	Surface to Surface	600 Km	5.6 T	0.5 T	In service
Agni I	MRBM, Single Stage	Surface to Surface	1250 Km	12 T	1 T	In service
Agni II	IRBM, Two Stage	Surface to Surface	3000 Km	16 T	1 T	In service
Sagarika (K15)	SLBM	Under water to surface	700 Km	6 T	1 T	In service
Shaurya	Hypersonic, Canister launched	Surface to Surface	700-1900 Km	6.2 T	1 T	In service
Agni V	ICBM, 3 stage	Surface to Surface	8000 Km	50 T	1.5 T	In service
Astra	Beyond visual range	Air to Air	80 Km	154 Kg	15 Kg	In service
Agni IV	IRBM, Two Stage	Surface to Surface	4000 Km	17 T	2 T	In service
Agni III	IRBM, Two Stage	Surface to Surface	5000 Km	22 T	2.5 T	In service
Prahaar	Quick reaction, Omnidirectional warhead	Surface to surface	150 Km	1280 Kg	200 Kg	In service
Brahmos	Cruise missile	Land, Naval, Air	300 Km	3 T	200 Kg	In service
Akash	Short Range	Surface to air	30 Km	720 Kg	60 Kg	In service
Nag	Fire and forget, anti tank, guided	Surface to surface, Air to surface	4 Km	42 Kg	8 Kg	In service
Barak 8	SRSAM, Ship Defense	Ship to air, Ship to surface	90 Km	275 Kg	60 Kg	In service, fitted on Kolkata class destroyers
Barak 1	SRSAM, (short range surface to air missile) , Ship Defense	Ship to air, Ship to surface	12 Km	98 Kg	22 Kg	In service, fitted on Shivalik class frigates
Prithvi I	SRBM	Surface to Surface	150 Km	4.4 Ton	1 Ton	Not in service
Trishul	Short range for Navy	Surface to air	9 Km	130 Kg	5 Kg	Not in service
Advanced Air Defence	Endoatmospheric Anti-ballistic missile	Surface to air	30-150 Km			Tested Successfully
Prithvi Air Defence	Exo-atmospheric Anti-ballistic missile	Surface to air	300-2000 Km			Tested Successfully

6 MAN PORTABLE ANTI TANK GUIDED MISSILE (MPATGM)

Context:

- In a major boost for Army, Defence Research and Development Organisation (DRDO) successfully test fired indigenously developed, low weight, fire and forget Man Portable Anti-Tank Guided Missile (MPATGM) for the second time today in the ranges of Rajasthan desert.

About:

- MPATGM is incorporated with advanced features including state-of-the-art Imaging Infrared Radar (IIR) Seeker with integrated avionics.
- The first test was conducted on 13th March 2019.
- In both the missions, the missiles hit the designated targets precisely at different ranges. All the mission objectives have been met.

Man Portable Anti-Tank Guided Missile (MPATGM):

- ▶ The MPATGM is a third-generation anti-tank guided missile (ATGM), which has been under development by DRDO in partnership with Indian defence contractor VEM Technologies Ltd.
- ▶ The missile is fitted with a high-explosive anti-tank (HEAT) warhead and has a maximum engagement range of about 2.5 Kms.
- ▶ These third generation missiles are meant to equip India Army's both infantry and mechanised units by the early 2020s.

7 ANTI-SATELLITE (A-SAT) MISSILE TEST 'MISSION SHAKTI

Context:

- India conducted its first anti-satellite (ASAT) missile test, successfully destroying a low earth orbit satellite in a 'Hit to Kill' mode in space by using a missile which covered a distance of 300 km to engage the target.

About:

- A DRDO-developed Ballistic Missile Defence (BMD) Interceptor Missile successfully engaged an Indian orbiting target satellite in Low Earth Orbit (LEO).
- The test was done in the lower atmosphere to ensure that there is no space debris.
- The interceptor missile was a three-stage missile with two solid rocket boosters.
- The test has demonstrated the Nation's capability to defend its assets in outer space.
- It is a vindication of the strength and robust nature of DRDO's programmes.
- The test has once again proven the capability of indigenous weapon systems.
- The test places India in a select group alongside the US, Russia and China, countries with demonstrated anti-satellite capability.
- Mission Shakti does not violate the 1967 Outer Space Treaty of which India is a signatory. The treaty prohibits only weapons of mass destruction in outer space, not ordinary weapons.

- It is much less harmful than the Chinese ASAT test in 2007 that led to a large-scale scattering of debris in space that threatened other satellites.

What is an anti-satellite missile test?

- ASAT is the technological capability to hit and destroy satellites in space through missiles launched from the ground.
- The first anti-satellite test (ASAT) was carried out by the US military way back in 1959. The then Soviet Union followed a year later.
- Thereafter, the two countries carried out a series of such tests up till early 1980s.
- After that there was a lull, broken only by the Chinese test in 2007.
- India became the fourth country to carry out an anti-satellite missile test.
- Other countries which could have the capability, like Israel, have not shown an intention to test.

Outer Space Treaty (1967)

- Also known as 'Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies' laid down the basic framework for international regulation on space related activities.
- It prohibits countries from deploying "nuclear weapons or any other kinds of weapons of mass destruction" in outer space.
- The treaty repeatedly emphasises that space is to be used for peaceful purposes. Presently, more than 100 countries are signatories to it. United States is also one of the signatories.
- The law universalises the outer space. It emphasises that no country can claim exclusive sovereignty of jurisdiction over space.

Moon Agreement (1979)

- It is a multilateral treaty that turns jurisdiction of all celestial bodies (including the orbits around such bodies) over to the international community. Thus, all activities must conform to international law, including the United Nations Charter.
- The treaty makes a declaration that the Moon should be used for the benefit of all states and all peoples of the international community. It also expresses a desire to prevent the Moon from becoming a source of international conflict.
- In practice it is a failed treaty because it has not been ratified by any state that engages in self-launched manned space exploration or has plans to do. As of January 2018, 18 states are parties to the treaty.
- As a follow-on to the Outer Space Treaty, the Moon Treaty intended to establish a regime for the use of the Moon and other celestial bodies similar to the one established for the sea floor in the United Nations Convention on the Law of the Sea.

8

'NIRBHAY' SUB-SONIC CRUISE MISSILE

Context:

- Defence Research & Development Organisation (DRDO) successfully test fired indigenously designed & developed Long Range Sub-Sonic Cruise Missile "Nirbhay" from the Integrated Test Range (ITR), Chandipur Odisha.

About:

- It is the sixth development flight trial with objective to prove the repeatability of boost phase, cruise phase using way point navigation at very low altitudes.

- The missile took off vertically turning horizontally into desired direction, booster separated, wing deployed, engine started, cruised all the intended waypoints.

NIRBHAY

- ▶ Type: Long range all weather subsonic cruise missile
- ▶ Used by : Indian Army, Navy, Air force
- ▶ Manufactured by: DRDO
- ▶ Weight : 15,00 kg
- ▶ Length: 20 Feet
- ▶ Diameter: 17 Feet
- ▶ Engine: Turbofan
- ▶ Range: 2000 km - 2500 km
- ▶ Speed : mach0.8 - mach 0.9



- The missile demonstrated its sea-skimming capability to cruise at very low altitudes.
- The entire flight was fully tracked by a chain of Electro Optical Tracking Systems, Radars and Ground Telemetry Systems deployed all along the sea coast.
- All the mission objectives were met.

9

FOURTH SCORPENE CLASS SUBMARINE – VELA

Context:

- Vela, the fourth Scorpene class submarine being constructed by Mazagon Dock Shipbuilders Limited (MDL) for the Indian Navy, was launched on 06 May 2019.

About:

- Presently Eight Warships and five submarines are under construction at MDL. MDL is one of the India's leading shipyards with a capacity to meet requirements of the Indian Navy.
- The Scorpene class of submarines can undertake multifarious tasks typically undertaken by any modern submarine which include anti-surface as well as anti-submarine warfare.
- The transfer of technology involves appropriate technical support by Naval Group to MDL in the field of construction, integration and tests of the submarines in India which is achieved through transfer of technical data package to MDL through information system as well as on job training to MDL's personnel on critical technologies.
- Leveraging the experience and the transfer-of-technology of the Scorpene project, with enhanced and upgraded infrastructure, MDL, is ready for undertaking construction of the future submarines.

Anti-submarine warfare (ASW):

- It is a branch of underwater warfare that uses surface warships, aircraft, or other submarines to find, track, and deter, damage, or destroy enemy submarines.
- Successful anti-submarine warfare depends on a mix of sensor and weapon technology, training, and experience.
- Sophisticated sonar equipment for first detecting, then classifying, locating, and tracking the target submarine is a key element of ASW.
- To destroy submarines, both torpedoes and naval mines are used, launched from air, surface, and underwater platforms.
- ASW also involves protecting friendly ships.

10 INS RANJIT**Context:**

- INS Ranjit, a Rajput class destroyer was decommissioned at a solemn yet grand ceremony at Naval Dockyard, Visakhapatnam culminating a glorious era on 06 May, 2019.

About:

- The ship commissioned on 15 September 1983 by Captain Vishnu Bhagwat in erstwhile USSR has rendered yeoman service to the nation for 36 years.
- The ship since her commissioning has sailed for 2190 days covering a distance of over 7,43,000 nautical miles which is equivalent to navigating around the world 35 times and 3.5 times the distance from earth to moon.
- The ship has been at the forefront of major naval operations and has the distinction of serving on both Eastern and Western seaboard.

11 APACHE HELICOPTER**Context:**

- First AH-64E (I) - Apache Guardian helicopter was formally handed over to the Indian Air Force at Boeing production facility in Mesa, Arizona, USA on 10 May 19.

About:

- IAF had signed a contract with US Government and M/s Boeing Ltd in September, 2015 for 22 Apache helicopters.
- The addition of AH-64 E (I) helicopter is a significant step towards modernisation of Indian Air Force's helicopter fleet.
- The helicopter has been customized to suit IAF's future requirements and would have significant capability in mountainous terrain.
- The helicopter has the capability to carry out precision attacks at standoff ranges and operate in hostile airspace with threats from ground.
- The ability of these helicopters, to transmit and receive the battlefield picture, to and from the weapon systems through data networking makes it a lethal acquisition.

- These attack helicopters will provide significant edge in any future joint operations in support of land forces.

AIRCRAFT	ORIGIN	INDIAN ARM FORCES	ROLE
Sukhoi Su-30MKI	Russia India	Indian Airforce	Air Superiority Fighter
Dassault Mirage 2000	France	Indian Airforce	Multirole Fighter Aircraft
Mikoyan MiG-29	Soviet Union	Indian Airforce	Air Superiority Fighter
SEPECAT Jaguar	France United Kingdom	Indian Airforce	Ground-Attack Aircraft
Gulfstream III	United States	Indian Airforce	Reconnaissance
BAE Sea Harrier	United Kingdom	Indian Naval Air Arm	Fighter aircraft
Boeing P-8 Poseidon	United States	Indian Naval Air Arm	Maritime Patrol
Dornier Do 228	Germany India	Indian Naval Air Arm	Utility Aircraft
Kamov Ka-31 Helix-B	Russia	Indian Naval Air Arm	Airborne early warning
Westland Sea King	United Kingdom	Indian Naval Air Arm	Anti-submarine warfare
HAL Chetak	France India	Army aviation corps	Search & Rescue, Utility Transport

Aircraft	Origin	Role
IAI Harpy	Israel	Unmanned combat air vehicle
IAI Harop	Israel	Unmanned combat air vehicle
IAI Heron	Israel	Unmanned aerial vehicle
DRDO Lakshya	India	Target drone
DRDO Nishant	India	Unmanned aerial vehicle
IAI Searcher	Israel	Unmanned aerial vehicle

12 FLIGHT TEST OF ABHYAS

Context:

- Defence Research and Development Organisation (DRDO) conducted successful flight test of ABHYAS - High-speed Expendable Aerial Target (HEAT) from Interim Test Range, Chandipur in Odisha.

About:

- The flight test was tracked by various RADARS & Electro Optic Systems and proved its performance in fully autonomous way point navigation mode.
- For its guidance and navigation it uses indigenously developed Micro-Electro-Mechanical Systems (MEMS) based navigation system.

- The configuration of ABHYAS is designed on an in-line small gas turbine engine and uses indigenously developed MEMS based navigation system for its navigation and guidance.
- The performance of the system was as per simulations carried out and demonstrated the capability of ABHYAS to meet the mission requirement for a cost effective HEAT.
- It has a Luneburg lens (a spherically symmetric gradient-index lens) in the nose cone which improves the radar cross-section of target for weapons practice.
- It has an Acoustic Miss Distance Indicator (AMD), a multi-role scoring system for gunnery training and weapons assessment) to indicate the distance it missed.

13

BRAHMOS MISSILE

Context:

- IAF successfully fired the BrahMos air version missile from its frontline Su-30 MKI fighter aircraft.

About:

- The air launched BrahMos missile is a **2.5 ton supersonic** air to surface cruise missile with ranges of close to **300 km**, designed and developed by BAPL.
- The IAF became the first Air Force in the world to have successfully fired an air launched **2.8 Mach** surface attack missile of this category on a sea target.
- The integration of the weapon on the aircraft was a very complex process involving mechanical, electrical and software modifications on aircraft.
- The BrahMos missile provides Indian Air Force a much desired capability to strike from large stand-off ranges on any target at sea or on land with pinpoint accuracy by day or night and in all weather conditions.
- The capability of the missile coupled with the superlative performance of the **Su-30MKI aircraft** gives the IAF the desired strategic reach.

BrahMos:

- The BrahMos - is a medium-range ramjet **supersonic cruise missile** that can be launched from **submarine, ships, aircraft, or land**. It is the **fastest supersonic cruise missile in the world**.
- It is a joint venture between the Russian Federation's NPO Mashinostroyeniya and India's Defence Research and Development Organisation (DRDO) who together have formed BrahMos Aerospace.
- It is based on the Russian P-800 Oniks cruise missile and other similar sea-skimming Russian cruise missile technology. The name BrahMos is a portmanteau formed from the names of two rivers, the Brahmaputra of India and the Moskva of Russia.
- It is the **world's fastest anti-ship cruise missile in operation**. The missile travels at speeds of **Mach 2.8 to 3.0**, which is being upgraded to **Mach 5.0**.
- The land-launched and ship-launched versions are already in service, with the air and submarine-launched versions currently in the testing phase. An air-launched variant of BrahMos appeared in 2012.
- A hypersonic version of the missile, BrahMos-II, is also presently under development with a speed of Mach 7-8 to boost aerial fast strike capability. It is expected to be ready for testing by 2020.
- India wanted the BrahMos to be based on a mid-range cruise missile like the P-700 Granit. Its propulsion is based on the Russian missile, and missile guidance has been developed by BrahMos Aerospace. The missile is expected to reach a total order US\$13 billion.

- ▶ In 2016, as India became a member of the Missile Technology Control Regime (MTCR), India and Russia are now planning to jointly develop a new generation of Brahmos missiles with 600 km-plus range and an ability to hit protected targets with pinpoint accuracy.

14 INS TARKASH

Context:

- INS Tarkash, a frontline warship of the Indian Navy, made a port call at Karlskrona, Sweden.

About:

- INS Tarkash is a state-of-the-art stealth frigate of the Indian Navy.
- It is equipped with a versatile range of weapons and sensors capable of addressing threats in all three dimensions.
- The ship is a part of the Indian Navy's Western Fleet and is under the operational Command of Flag Officer Commanding-in-Chief, Western Naval Command.
- This marks the first visit of an Indian Naval Ship to Swedish shores after a gap of more than 15 years.
- India and Sweden have had a number of high level bilateral visits and interactions resulting in a rapid growth in relations across a broad spectrum. The two navies have also been regular contributors to the global operations against piracy.
- Indian Navy's mission of building 'Bridges of Friendship' and strengthening international cooperation with friendly countries
- India and Sweden are working to meet the growing challenges of the maritime environment.

15

DRDO SUCCESSFULLY FLIGHT-TESTS STATE-OF-THE-ART QUICK REACTION SURFACE-TO-AIR MISSILES AGAINST LIVE AERIAL TARGETS FROM ITR, CHANDIPUR

Context:

- Defence Research Development Organisation (DRDO) today successfully flight-tested its state-of-the-art Quick Reaction Surface-to-Air Missiles (QRSAM) against live aerial targets from Integrated Test Range (ITR), Chandipur.

About:

- Two missiles, developed by DRDO, were tested against two live targets meeting complete mission objectives of engaging the targets. QRSAM, with many state of the art technologies, engaged the targets at different ranges and altitudes.
- The systems have been tested in final configuration with RADAR mounted on a vehicle & missiles on the launcher.
- The systems are equipped with indigenously-developed Phased array radar, Inertial Navigation System, Data Link & RF seeker.
- The entire mission was captured by various Electro Optical Tracking Systems, Radar Systems and Telemetry Systems.

- The system is being developed for Indian Army with search and track on move capability with very short reaction time.

16

AIR-TO-AIR MISSILE ASTRA SUCCESSFULLY FLIGHT TESTED FROM SU-30 MKI

Context:

- Air-to-Air missile Astra successfully flight tested from Su-30 MKI

About:

- Air-to-Air missile, ASTRA, has been successfully flight tested on 16 September 2019 off the coast of Odisha.
- The missile was launched from Su-30 MKI as a part of User trials.
- The live aerial target was engaged accurately demonstrating the capability of first indigenous air-to-air missile.
- The mission profile was executed in a text book manner. Various Radars, Electro-Optical Tracking System (EOTS) and Sensors tracked the missile and confirmed its engagement with target.

17

SCORPENE SUBMARINE "KHANDERI"

Context:

- Mazagon Dock Shipbuilders Limited delivers second Scorpene submarine "KHANDERI" to Indian Navy

About:

- The submarine 'KHANDERI' is named after the wide snouted Saw fish, a deadly sea predator of the great Indian Ocean.
- The first Submarine Khanderi was commissioned into the Indian Navy on 06th December 1968 and decommissioned on 18th October 1989 after more than 20 years of yeoman service to the nation. In true nautical tradition, she will now be 'reincarnated' by MDL to guard the vast maritime area of our nation.
- The technology utilised in the Scorpene has ensured superior features of the submarine.
- The Scorpene class of submarines can undertake multifarious tasks typically undertaken by any modern submarine which include anti-surface as well as anti-submarine warfare.
- The constructions of third Scorpene at MDL, KARANJ, was started in 2018, and is currently undergoing the rigorous phase of sea trials. The fourth Scorpene, VELA was recently launched in May 2019, and is being prepared for sea trials, whilst the remaining two submarines, VAGIR and VAGSHEER, are in various stages of outfitting. The Scorpene project would not have been achieved up to the current progress without the unconditional support and active encouragement of the Department of Defence Production (MoD).

18

TEJAS-1 (LAH) AND TEJAS MK2 (MWF) AIRCRAFTS

- Aeronautical Development Agency (ADA) is the Programme, Management Agency for design & development of Light Combat Aircraft (LCA) – Tejas.

- Hindustan Aeronautics Limited (HAL) is the design partner and production agency and manufacturing facilities have been established by HAL.
- LCA – Tejas Mk1 aircraft has attained Initial Operational Clearance (IOC) on 20th December, 2013 on completion of required performance trials and all 16 fighter aircraft against IOC order have been manufactured by HAL.
- Subsequently Final Operational Clearance (FOC) was attained by ADA on 20th February, 2019 and production activities of FOC configuration have commenced at HAL.
- Indian Air Force LCA Squadron "Flying Daggers" is operational since 1st July, 2016, with the induction of IOC aircraft.
- Tejas Mk-II preliminary design of the aircraft has been finalized. However, the same is in initial development stage. Induction & production can commence only after successful development & test flight.
- HAL Hyderabad is an Avionics Division and avionics related to HAL manufactured platforms including LCA are manufactured at this facility.



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**DISASTER
MANAGEMENT**

1

INDIAN OCEAN RIM ASSOCIATION (IORA) MEET ON DISASTER RISK MANAGEMENT

Context:

- The Ministry of Home Affairs in collaboration with the Ministry of External Affairs and National Disaster Management Authority (NDMA) organised a meeting of Indian Ocean Rim Association (IORA) Cluster Group on Disaster Risk Management (DRM) on 5-6 February 2019 in New Delhi.

About:

- Indian Ocean Rim Association is an inter-governmental organisation and has many disaster-prone countries among its 22 members and nine dialogue partners. DRM is one of its priority areas and its Action Plan (2017-2021) has specific goals to improve resilience in IORA countries.
- The two-day meeting featured interactive sessions and focussed on development of a draft Work Plan for DRM in IORA. It also deliberated on the need for establishing a DRM Core Group to take forward the agreed objectives under the Work Plan.
- It would strengthen cooperation in disaster response interventions, including deployment of response teams and mobilization of relief material to affected countries. Deliberations at the meeting would also aid information exchange, establishment of disaster database(s) and sharing of best practices.

Indian Ocean Rim Association (IORA):

- ▶ IORA is an international organization with 21 Member States – Australia, Bangladesh, Comoros, India, Indonesia, Iran, Kenya, Madagascar, Malaysia, Mauritius, Mozambique, Oman, Seychelles, Singapore, Somalia, South Africa, Sri Lanka, Tanzania, Thailand, UAE and Yemen.
- ▶ The organisation was first established as Indian Ocean Rim Initiative in Mauritius on March 1995 and formally launched on 6–7 March 1997 by the conclusion of a multilateral treaty known as the Charter of the Indian Ocean Rim Association for Regional Co-operation.
- ▶ It is based on the principles of Open Regionalism for strengthening Economic Cooperation particularly on Trade Facilitation and Investment, Promotion as well as Social Development of the region. The Coordinating Secretariat of IORA is located at Ebene, Mauritius.

2

FLOOD MANAGEMENT AND BORDER AREAS PROGRAMME (FMBAP)

Context:

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

Benefits:

- The FMBAP Scheme will be implemented throughout the country for effective flood management, erosion control and anti-sea erosion.
- The proposal will benefit towns, villages, industrial establishments, communication links, agricultural fields, infrastructure etc. from floods and erosion in the country.
- The catchment area treatment works will help in reduction of sediment load into rivers.

Salient features:

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

3

GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY (GFDRR)

Context:

- India is unanimously chosen as co-chair of the Consultative Group (CG) of Global Facility for Disaster Reduction and Recovery (GFDRR) for the fiscal year 2020.

About:

- The decision was taken during the CG meeting of GFDRR held in Geneva, Switzerland, on the margins of the 6th Session of the Global Platform for Disaster Risk Reduction (GPDRR) 2019.
- The CG Meeting was co-chaired by Africa Caribbean and Pacific (ACP) Group of States, the European Union (EU) and World Bank. Additionally, GFDRR in cooperation with the UNDRR and the EU also organized the 4th edition of World Reconstruction Conference (WRC) on May 13-14, 2019.
- GFDRR is a global partnership that helps developing countries better understand and reduce their vulnerability to natural hazards and climate change. GFDRR is a grant-funding mechanism, managed by the World Bank that supports disaster risk management projects worldwide.
- It is presently working on the ground with over 400 local, national, regional, and international partners and provides knowledge, funding, and technical assistance.
- **India became member of CG of GFDRR in 2015** and expressed its interest to co-chair in last meeting of CG held in October 2018. India's candidature was backed by its consistent progress in disaster risk reduction (DRR) in the country and its initiative to form a coalition on disaster resilient infrastructure. This will give the country an opportunity to work with the member countries and organizations of GFDRR with a focused contribution towards advancing the disaster risk reduction agenda during the course of the year.
- This is the first time that the country has been afforded the opportunity of co-chairing the CG meeting of GFDRR. India would like to pursue a focused agenda and develop synergies with ongoing work streams of GFDRR. Disaster Resilient Infrastructure (DRI) will be a central theme of engagement with the GFDRR partners and stakeholders.

4

INTERNATIONAL COALITION FOR DISASTER RESILIENT INFRASTRUCTURE

Context:

- The union Cabinet approves establishment of an International Coalition for Disaster Resilient Infrastructure.

About:

- The CDRI is proposed to be launched at the UN Climate Action Summit in New York, USA on 23rd September 2019.

The approval is for the following initiatives:

- Establishment of the International 'C.D.R.I.' along with its supporting Secretariat office in New Delhi;
- Establishment of the Secretariat of the CDRI as a Society under The Societies Registration Act, 1860 in New Delhi as 'CDRI Society' or similar name as per availability. The memorandum of association and by-laws of the 'CDRI Society' will be prepared and finalized by the National Disaster Management Authority (NDMA), in due course;
- In-principle approval for Government of India support of Rs. 480 crore (approx. USD 70 million) to CDRI for a corpus required to fund technical assistance and research projects on an on-going basis, setting up the Secretariat office and covering recurring expenditures over a period of 5 years from 2019-20 to 2023-24; and
- The endorsed version of the Charter document that will act as the founding document of the CDRI. The charter will be finalized after taking inputs from potential member countries by the NDMA in consultation with the Ministry of External Affairs.

Major Impact:

The CDRI will serve as a platform where knowledge is generated and exchanged on different aspects of disaster and climate resilience of infrastructure. It will bring together technical expertise from a multitude of stakeholders. In doing so, it will create a mechanism to assist countries to upgrade their capacities and practices, with regard to infrastructure development in accordance with their risk context and economic needs.

Innovation:

- A global coalition for disaster resilient infrastructure would address concerns that are common to developing and developed countries, small and large economies, countries at early and advanced stages of infrastructure development, and countries that have moderate or high disaster risk. Few concrete initiatives work at the intersection of Sendai Framework, Sustainable Development Goals (SDGs) and Climate Change Adaptation with a focus on infrastructure. Focus on disaster resilient infrastructure would simultaneously address the loss reduction targets under the Sendai Framework, address a number of SDGs and also contribute to climate change adaptation. Hence, there is a clear niche for a Global Coalition for Disaster Resilient Infrastructure.

5

SCO JOINT URBAN EARTHQUAKE SEARCH & RESCUE EXERCISE (SCOJTEX)-2019

- On the initiative of Government of India, the National Disaster Response Force (NDRF) is hosting "Shanghai Cooperation Organization (SCO) Joint Urban Earthquake Search & Rescue Exercise (SCOJtEx.)-2019" of all 08 SCO member countries, with the 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 four day long simulation exercise shall be held at Delhi.
- The participants of all 08 member countries namely China, India, Kazakhstan, 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.
- 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.

6 NATIONAL FIRE SERVICE COLLEGE

- The government has dedicated to the Nation the new campus of the **National Fire Service College (NFSC)** in **Nagpur** and also laid the foundation of the **National Disaster Response Force (NDRF) Academy at Nagpur**.
- The Government also announced the **Subhash Chandra Bose Award** in the field of **Disaster Management**.

Role of NDRF:

- Fire service is a **state subject** and has been included as a municipal function in the **XII schedule of the Constitution of India**.
- The municipal corporations and local bodies are responsible for providing fire services in many states.
- With time, India is emerging as the hub for training disaster management personnel in the SAARC region and the recent developments will further facilitate the exchange of best practices and minimise the effects of disasters on the people.
- NDRF has emerged as the leading disaster management force globally and it has achieved all benchmarks under Sendai Framework for Disaster Risk Reduction.

The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted by the UN Member States in 2015 in Sendai City, Japan. The Sendai Framework aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries over the next 15 years.

7 SAFETY IN MINES

Context:

- Cabinet approves MoU between India and Australia on the safety in Mines, Testing and Research Station.

About:

The MoU will help in establishing a partnership between DGMS and SIMTARS for: Implementation of risk based safety management system, providing training organising, conference, seminar and other technical meetings, setting up occupations safety and health academy and national mine disaster centre, and Modernising R&D laboratory of DGMS. The memorandum of understanding will become operative from the date of signing and remain in effect for three years.

Implementation strategy:

The memorandum of understanding will become operative from the date of signing and remain in effect for three years.

Background:

Mining accident rates in Australia is the lowest in the world. Australia has pioneered in conceptualising and implementing risk based Safety Management Plans for the mining sector using the technique of hazard identification and risk assessment. SIMTARS is known to have exclusive expertise in Mines Safety Management Systems.

Directorate General of Mines Safety (DGMS)

- ▶ The Directorate General of Mines Safety (DGMS) is an agency of the India which administers the provisions of the government of India Mines Act, 1952 and, the Rules and Regulations framed there under.
- ▶ As per Constitution of India, occupational safety, welfare and health of workers employed in mines (Coal, Metalliferous and oil-mines) are the concern of the Central Government, under the Union Ministry of Labour & Employment.
- ▶ DGMS carries out the mandates of the Mine Act at all mining and mineral processing operations in the India, regardless of size, number of employees, commodity mined, or method of extraction.
- ▶ The organization has its headquarters at Dhanbad (Jharkhand) and is headed by Director-General of Mines Safety.

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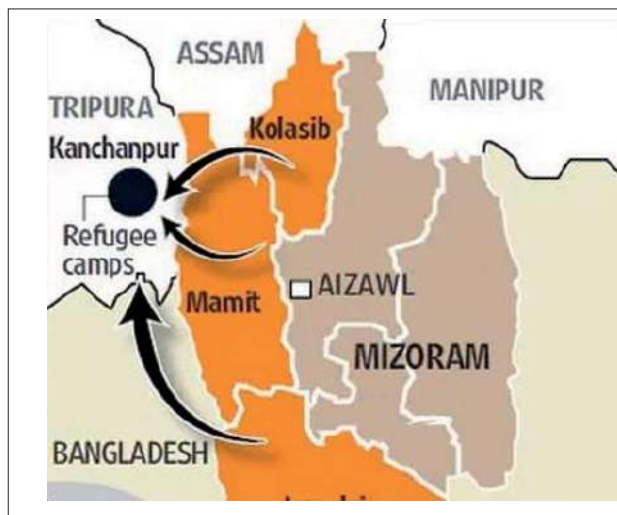
SECURITY

1

REPATRIATION OF BRU MIGRANTS FROM TRIPURA TO MIZORAM

Context:

- Under the agreement, around 34,000 Bru Refugees are to settle in Tripura. The Centre will offer their rehabilitation helps with an allocated budget. With this, the refugees are now eligible to enjoy social welfare schemes of state and central governments.
- According to the agreement, the displaced families are to be provided with land. The land is to be provided by the Tripura Government.
- Due to ethnic violence in the western part of Mizoram in October 1997, a large number of minority **Bru (Reang)** families migrated to North Tripura in 1997-1998.
- In 2010, GoI began its efforts to permanently rehabilitate them as they constantly demanded to settle in Tripura. In 2018, GoI signed an agreement with the State Governments of Tripura and Mizoram in order to help the families and increase the aid substantially.
- On January 17, 2020, Government of India, Bru-Reang representatives, Government of Tripura and Mizoram signed an agreement in New Delhi to end the refugee crisis of Bru-Reang community.

**Challenges in implementation:**

- It is doubtful whether the land that is allocated to Brus in Tripura will be accepted by the domicile tribes in Tripura.
- Till the pact, the Tripura Government was eager to repatriate the Brus to Mizoram. As the new pact settles the Brus in Tripura, it needs a lot of political will from Tripura to implement welfare programmes for the Brus.
- The existing Bru families in Mizoram still are opposed by some ethnic organizations of Mizoram, which might trigger another exodus if there is no settlement at the place of the conflict.

Bru-Reang Tribes:

The Bru Tribes are locally called Reang and hence the name Bru-Reang. They are ethnic tribes living in India, Laos, Vietnam and Thailand. They speak Katic language. They believe in Animism religion and some others believe in Buddhism. The Bru-Reang are one of the 21 ethnic tribes of Tripura that are included in the Scheduled Tribe list. Some of them are Tibeto-Burmese origin.

2

HIGH LEVEL COMMITTEE TO IMPLEMENT CLAUSE 6 OF ASSAM ACCORD SEVERAL AND DEMANDS OF BODOS

Context:

- The Union Cabinet chaired by Prime Minister Shri Narendra Modi approved the setting up of a High Level Committee for implementation of Clause 6 of the Assam Accord and measures envisaged in the Memorandum of Settlement, 2003 and other issues related to Bodo community.

About:

- After Assam agitation of 1979-1985, Assam Accord was signed on 15th August, 1985. Clause 6 of the Assam Accord envisaged that appropriate constitutional, legislative and administrative safeguards, shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people.
- However, it has been felt that Clause 6 of the Assam Accord has not been fully implemented even almost 35 years after the Accord was signed. The Cabinet, therefore, approved the setting up of a High Level Committee to suggest constitutional, legislative and administrative safeguards as envisaged in Clause 6 of the Assam Accord.
- The Committee shall examine the effectiveness of actions since 1985 to implement Clause 6 of the Assam Accord.
- The Committee will hold discussions with all stakeholders and assess the required quantum of reservation of seats in Assam Legislative Assembly and local bodies for Assamese people.
- The Committee will also assess the requirement of measures to be taken to protect Assamese and other indigenous languages of Assam, quantum of reservation in employment under Government of Assam and other measures to protect, preserve and promote cultural, social, linguistic identity and heritage of Assamese people.
- It is expected that the setting up of the Committee will pave the way for the implementation of the Assam Accord in letter and spirit and will help fulfil longstanding expectations of the Assamese people.
- The Cabinet also approved a number of measures to fulfil the outstanding issues related to the Bodo community. The Bodo Accord was signed in 2003 which resulted in the establishment of a Bodoland Territorial Council under Sixth Schedule of the Constitution of India. However, there have been representations from different organizations of Bodos to fulfil various outstanding demands.
- The Cabinet today approved the establishment of a Bodo Museum-cum-language and cultural study center, modernization of existing All India Radio Station and Doordarshan Kendra at Kokrajhar and naming a Superfast Train passing through BTAD as ARONAI Express.
- The State Government will also take necessary measures related to appropriate land policy and land laws, besides setting up of Institutions for Research and Documentation of Customs, Traditions and Languages of indigenous communities.

Who are bodos?

- The Bodos, an ethno-linguistic group believed to be the earliest inhabitants of Assam, are one of the Indo-Mongoloid communities belonging to the Tibeto-Burman branch of the Sino-Tibetan family. At the zenith of their thriving civilisation, they ruled vast territories encompassing almost the entirety of northeast India, parts of Nepal, Bhutan, North Bengal and Bangladesh. The Bodos are recognized as a *plains tribe* in the Sixth Schedule of the Indian Constitution.

What is Assam accord?

- The Assam Accord (1985) was a Memorandum of Settlement (MoS) signed between representatives of the Government of India and the leaders of the Assam Movement in New Delhi on 15 August 1985. A six-year agitation demanding identification and deportation of illegal immigrants was launched by the All Assam Students' Union (AASU) in 1979. It culminated with the signing of the Assam Accord.
- The accord brought an end to the Assam Movement and paved the way for the leaders of the agitation to form a political party and form a government in the state of Assam soon after.
- Though the accord brought an end to the agitation, some of the key clauses are yet to be implemented, which has kept some of the issues festering.

3

CEASEFIRE WITH NSCN/NK, NSCN/R & NSCN/K-KHANGO**Context:**

- A Ceasefire is in operation between Government of India and National Socialist Council of Nagaland (Neopao Konyak/Kitovi) (NSCN/NK) and National Socialist Council of Nagaland/Reformation (NSCN/R).

About:

- It was decided to extend the Suspension of Operation with NSCN/NK & NSCN/R for a further period of one year with effect from 28th April, 2019 i.e., till 27th April, 2020.
- This was signed on 15th April, 2019 by Joint Secretary, Ministry of Home Affairs on behalf of Government of India and Shri Jack Jimomi, Supervisor, GPRN/NSCN on behalf of NSCN/NK and by Dr. Amento Chishi, Supervisor & Shri Toshi Longkumer, Secretary on behalf of NSCN/R.
- National Socialist Council of Nagaland/K-Khango has also re-entered into a fresh Ceasefire Agreement with the Government of India with effect from 15th April, 2019 for a period of one year.

State	Name of Armed Group
Assam	United Liberation Front of Assam (ULFA)
	National Democratic Frnt of Bodoland (NDFB)
	Kamtapur Liberation Organization (KLO)
Manipur	People's Liberaton Army (PLA)
	United National Liberation Front (UNLF)
	People's Revolutionary Party of Kangleipak (PREPAK)
	Kangleipak Communist Party (KCP)
	Kanglei Yaol Kamba Lup (KYKL)
	Manipur People;s Liberation Front (MPLF)
	Rvolutionary People's Front (RPF)
	Coordination Committee or Cor-com
Meghalaya	Hynniewtre National liberation Council (HNLC)
	Garo National Liberation Army (GNLA)
Nagaland	The National Socialist Council of Nagaland (Khaplang)
	National Socialist Council of Nagaland (Isak Muivah) - [NSCN (I/M)] (In Ceasefire)
	National Socialist Council of Nagaland (Kitovi-Neopaokonyak) (In Ceasefire)
	National Socialist Council of Nagaland (Reformation) [NSCN(R)] [In Ceasefire]

4 MODERNIZATION OF POLICE FORCE

Background:

- 'Public Order' and 'Police' are State subjects as per the Constitution of India. Therefore, equipping of police forces is the primary responsibility of the State Governments. However, the States have not been able to modernize and equip their police forces up to the desired level due to financial constraints.

Steps taken by the Government in this regard:

- It is in this context that the Ministry of Home Affairs has been supplementing the efforts of the State Governments for equipping and modernizing their police forces under the scheme of 'Assistance to States for Modernisation of Police' [erstwhile scheme of Modernisation of Police Forces (MPF)]. Under this scheme, the States have been providing central assistance for acquisition of latest weaponry, training gadgets, advanced communication and forensic equipment etc.
- Jammu & Kashmir, insurgency affected North Eastern States and Left Wing Extremism (LWE) affected districts have also been provided assistance for purchase of operational vehicles and for construction of police building, etc.
- The Crime and Criminal Network and Systems (CCTNS) has been rolled out nationally and as on 30.11.2018, it has been deployed in 14,764 police stations out of 15,705 police stations in the country.
- As on 30.11.2018, 14,724 police stations are entering all (100%) FIRs on the CCTNS software. 2.25 crores FIRs have been registered on CCTNS and 3.9 crore legacy records have been digitized (as on 30.11.2018). 12,153 police stations have been provided national level search on Crime and Criminal Data of CCTNS through Digital Police Portal.
- The Government of India assists States and UT administrations in combating cyber-crimes by providing financial grants under various schemes and issuing advisories.
- Ministry of Home Affairs has also approved a scheme titled 'Indian Cyber Crime Coordination Centre (I4C) to deal with all types of cybercrime in a comprehensive and coordinated manner.
- Under the agreement, around 34,000 Bru Refugees are to settle in Tripura. The Centre will offer their rehabilitation helps with an allocated budget. With this, the refugees are now eligible to enjoy social welfare schemes of state and central governments.
- According to the agreement, the displaced families are to be provided with land. The land is to be provided by the Tripura Government.

5 BOLD-QIT PROJECT

Context:

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

Why is it needed?

- Border Security Force is responsible for safeguarding of 4,096 Km long International Border with Bangladesh. At various places, it is not possible to erect Border Fence due to the geographical barriers.
- The 61 Kms of Border area in Dhubri where River Brahmaputra enters into Bangladesh is consisting of vast char lands and innumerable river channels thus making border guarding in this area, a daunting task especially during rainy season.

About the Project:

- BOLD-QIT is the project to install technical systems under the Comprehensive Integrated Border Management System (CIBMS), which enables BSF to equip Indo-Bangla borders with different kind of sensors in unfenced riverine area of Brahmaputra and its tributaries.
- Now, the entire span of River Brahmaputra has been covered with data network generated by Microwave communication, OFC Cables, DMR Communication, day and night surveillance Cameras and intrusion detection system.
- These modern gadgets provide feeds to BSF Control Rooms on the Border and enable BSF Quick Reaction Teams to thwart any possibility of Illegal Cross Border Crossing/ Crimes.
- The implementation of this project will not only help BSF to curb all type of cross border crimes but also provide respite to the troops from round the clock human surveillance.

Comprehensive Integrated Border Management System (CIBMS)

- CIBMS integrates, manpower, sensors and command and control so that situational awareness can be improved and quick response as per circumstances can be facilitated. One of the major components of CIBMS is the 'virtual fence'.
- This will be very helpful, keeping the difficult geographical features in mind.
- The second component is the command and control, to help in optimum utilization of resources for border management.
- Another component is power management so that CBIMS can run without any interruptions.

6**LIBERATION TIGERS OF TAMIL EELAM (LTTE)****Context:**

- The Central Government has extended the ban on the Liberation Tigers of Tamil Eelam (LTTE) for another five years under sub-sections (1) and (3) of section 3 of the Unlawful Activities (Prevention) Act, 1967 (37 of 1967) with immediate effect.

About:

- The notification states that the LTTE's continued violent and disruptive activities are prejudicial to the integrity and sovereignty of India; and it continues to adopt a strong anti-India posture as also continues to pose a grave threat to the security of Indian nationals.
- The latest version of the list contains 41 entries, including, apart from the LTTE, Khalistani terrorist organisations, Pakistan-based terror groups, Islamic State or Daesh, and Indian Mujahideen.
- It also includes some Northeastern militant organisations, Kashmiri separatist organisations, Maoist groups, and the Students Islamic Movement of India (SIMI)

Liberation Tigers of Tamil Eelam (LTTE)

- LTTE or the Tamil Tigers was a Tamil militant and political organization that was based in northeastern Sri Lanka.
- Its aim was to secure an independent state of Tamil Eelam in the north and east in response to the state policies of successive Sri Lankan governments towards Tamils.
- Founded in May 1976 by Velupillai Prabhakaran, it was involved in armed clashes against the Sri Lankan state forces and by the late 1980s was the dominant Tamil militant group in Sri Lanka. The escalation of intermittent conflict into a full-scale nationalist insurgency however did not commence before the countrywide pogroms against Tamils.

- ▶ Since 1983, more than 80,000 have been killed in the civil war that lasted 26 years, a large number of whom were Sri Lankan Tamil civilians.
- ▶ The LTTE which started out as a guerrilla force, over time, increasingly came to resemble that of a conventional fighting force with a well-developed military wing that included a navy, an airborne unit, an intelligence wing, and a specialized suicide attack unit.
- ▶ It was designated as a terrorist organisation by 32 countries, including the European Union, Canada, the United States, and India.
- ▶ It was known for using women and children in combat and is recognized for having carried out a number of high-profile assassinations, including Sri Lankan President Ranasinghe Premadasa in 1993 and former Indian Prime Minister Rajiv Gandhi in 1991.
- ▶ India first banned the LTTE after the assassination of Rajiv Gandhi; the ban was last extended for five years in 2014.

Unlawful Activities (Prevention) Act, 1967 (UAPA)

- ▶ UAPA is India's primary anti-terror law.
- ▶ It provides for effective prevention of certain unlawful activities of individuals and associations.
- ▶ It helps to deal with terrorist activities, and for matters connected therewith.
- ▶ Section 3 of the UAPA deals with the declaration of an association as unlawful.
- ▶ It specifies that notifications by the government making such a declaration shall specify the grounds on which it is issued.
- ▶ The notification shall also contain such other particulars as the Central government may consider necessary.

7

CYBER EXERCISE

Context:

- After the successful conduct of workshop on Cyber Warfare & Technology, wherein plethora of lessons emerged, Directorate of Indian Defence University is organised a two day Cyber Exercise on Scenario Building & Response in New Delhi.

About:

- The Exercise was represented by Services, NSCS, NTRO, CERT-in, DRDO, NIC, CSRC, Academia and Industry.
- This exercise incorporated all best practices which were recommended during the cyber workshop held earlier with a view to exercise options at different levels to seek synergized response based on the assessment of situation and own capability.
- The scope of these exercises would encompass the threat landscape and its impact, incident reporting & response framework, procedures for information exchange, attribution, evidence gathering and malicious service takedown, enhancement of capabilities required to protect information, and information systems, enhance cyber awareness, readiness and coordination, integrated international responses & inter-governmental / inter-agency partnerships.
- This exercise is planned to be conducted on an annual basis under the aegis of Indian Defence University, which will also involve Indian agencies and subsequently participation from agencies from Friendly Foreign Countries to jointly build the capability against cyber threats.

8

INDIAN CYBER CRIME COORDINATION CENTRE (I4C)

- The Central Government has inaugurated the Indian Cyber Crime Coordination Centre (I4C) and also dedicated National Cyber Crime Reporting Portal to the Nation. This state-of-the-art Centre is located in New Delhi.
- The 'I4C' is a 7 pronged scheme to fight cyber crimes that are on rise across the country.
- It has seven components:
 - National Cyber Crime Threat Analytics Unit
 - National Cyber Crime Reporting Portal
 - National Cyber Crime Training Centre
 - Cyber Crime Ecosystem Management Unit
 - National Cyber Crime Research and Innovation Centre
 - National Cyber Crime Forensic Laboratory Ecosystem
 - Platform for Joint Cyber Crime Investigation Team.
- The scheme to setup I4C was approved in October 2018 to deal with all types of cybercrimes in a comprehensive and coordinated manner.

About National Cyber Crime Reporting Portal:

- National Cyber Crime Reporting Portal (www.cybercrime.gov.in) is a citizen-centric initiative that will enable citizens to report cyber crimes online through the portal.
- All the cyber crime related complaints will be accessed by the concerned law enforcement agencies in the States and Union Territories for taking action as per law.
- This portal was launched on pilot basis on 30th August, 2019 and it enables filing of all cyber crimes with specific focus on crimes against women, children, particularly child pornography, child sex abuse material, online content pertaining to rapes/gang rapes, etc.
- In future, this portal will provide for chatbot for automated interactive assistance system to the public for guidance on cybercrime prevention and how to report incidents on the portal.

9

MODERNISATION OF ARMED FORCES**Context:**

- During the last three financial years (2016-17 to 2018-19), contracts worth about Rs. 1,38,727.16 crore have been signed with foreign vendors for capital procurements of defence equipment for Armed Forces.
- Government is taking measures for modernization of the Armed Forces, through procurement of new equipment and upgrading of existing equipment and systems. The modernization projects are being progressed as per the approved Capital Acquisition Plans and in terms of the extant Defence Procurement Procedure.

About:

- Since the launch of 'Make in India' in September 2014, several measures have been taken by the Government to promote indigenous design, development and manufacture of defence & aerospace equipment in the country under 'Make in India' by harnessing the capabilities of the public and private sector.

- Defence Procurement Procedure (DPP) has been revised in 2016 wherein specific provisions have been introduced for stimulating growth of the domestic defence industry.
- The details of Budget Estimates (BE), Revised Estimates (RE) and Actual Expenditure (Actuals) on the modernisation of Armed Forces under Defence Services Estimates (DSE) for the last three years are as under:

(Rs. in crore)

Year	Budget Estimates (BE)	Revised Estimates (RE)	Expenditure (Actuals)
2016-17	69,898.51	62,619.36	69,280.16
2017-18	69,473.41	68,965.24	72,732.28
2018-19	74,115.99	73,882.95	75,900.54

Steps taken by Government:

- Government has decided to establish two defence industrial corridors to serve as an engine of economic development and growth of defence industrial base in the country. These are spanning across Chennai, Hosur, Coimbatore, Salem and Tiruchirappalli in Tamil Nadu and spanning across Aligarh, Agra, Jhansi, Kanpur and Lucknow in Uttar Pradesh (UP).
- An innovation ecosystem for Defence titled Innovations for Defence Excellence (iDEX) was launched in 2018.
- iDEX is aimed at creation of an ecosystem to foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, Start-ups, Individual Innovators, R&D institutes and Academia and provide them grants/funding and other support to carry out R&D which has potential for future adoption for Indian defence and aerospace needs.
- The Defence Ministry has instituted a new framework titled 'Mission RakshaGyan Shakti' which aims to provide boost to the IPR culture in indigenous defence industry.
- Government also notified a Policy for indigenisation of components and spares used in Defence Platforms. The objective of the policy is to create an industry ecosystem which is able to indigenize the imported components (including alloys & special materials) and sub-assemblies for defence equipment and platform manufactured in India.
- Defence Investor Cell has been created in the Ministry to provide all necessary information including addressing queries related to investment opportunities, procedures and regulatory requirements for investment in the sector.
- FDI Policy has been revised and under the revised policy, FDI is allowed under automatic route upto 49% and beyond 49% through Government route wherever it is likely to result in access to modern technology or for other reasons to be recorded.
- The Defence Products List for the purpose of issuing Industrial Licenses (ILs) under IDR Act has been revised and most of the components, parts, sub-systems, testing equipment and production equipment have been removed from the list, so as to reduce the entry barriers for the industry, particularly small & medium segment.
- The process for export clearance has been streamlined and made transparent & online.
- Government has set up the Technology Development Fund (TDF) to encourage participation of public/private industries especially MSMEs, through provision of grants, so as to create an eco-system for enhancing cutting edge technology capability for defence application.
- Government has also promulgated the policy of Strategic Partnership in the Defence Sector which encourages participation of the private sector in manufacture of major Defence platforms and equipment in four selected segments viz. Submarines, Fighter Aircraft, helicopters and Armored Fighting vehicles/Tanks.

10 THE FIRST CHIEF OF DEFENCE STAFF (CDS) OF INDIA

- General Bipin Rawat has assumed the newly formed office of the Chief of Defence Staff (CDS).
- Ex-Chief of the Army Staff General Rawat, is an alumnus of **National Defence Academy, Defence Services Staff College, Wellington; Higher Command, National Defence College.**
- He also attended the **Command and General Staff Course** at **Fort Leavenworth in the United States.**
- During his distinguished career in the Army, General Rawat commanded an **Infantry battalion** along the **Line of Actual Control** in the Eastern Sector, a **Rashtriya Rifles Sector**, an Infantry Division in the Kashmir Valley and a Corps in the North East.
- General Rawat had also commanded a **Multinational Brigade** in the **Democratic Republic of Congo.**
- As an Army Commander, he commanded a theatre of operations along the Western Front and was appointed the **Vice Chief of the Army Staff** before assuming the office of Chief of the Army Staff.
- During the span of over 41 years in the Army, General Rawat has been awarded several gallantry and distinguished service awards.

11 PM DEDICATES 5 DRDO YOUNG SCIENTISTS LABORATORIES TO THE NATION:

- Prime Minister Shri Narendra Modi has dedicated to the nation 5 Young Scientists Laboratories of Defence Research and Development Organisation (DRDO).
- DRDO Young Scientist Laboratories (DYSLs) are located in five cities:
 - Bengaluru
 - Mumbai
 - Chennai
 - Kolkata
 - Hyderabad
- Each lab will work on key advanced technology of importance to the development of futuristic defence systems viz, Artificial intelligence, Quantum technologies, Cognitive technologies, Asymmetric technologies and Smart materials.

12 OPERATION SANKALP

- Amid the deteriorating security situation in the Middle East, the Indian Navy continues to maintain its presence in the Gulf region as part of the 'Operation Sankalp' to ensure the security of its sea-borne trade and the safety of the Indian Flag merchant Vessels transiting through the region.

What is Operation Sankalp?

- Under the Operation Sankalp, launched in 2019, Indian Navy deployed, in the Gulf of Oman, to re-assure Indian Flagged Vessels operating/ transiting through the Persian Gulf and Gulf of Oman following the **maritime security incidents** in the region.
- **IN Ships Chennai** and **Sunayna** were deployed in the Gulf of Oman and Persian Gulf to undertake Maritime Security operations. In addition, aerial surveillance by IN aircraft is also being undertaken in the area.

- The operation is being progressed in close coordination with all stakeholders including Ministry of Defence, Ministry of External Affairs, Ministry of Shipping and Ministry of Petroleum and Natural Gas.

13 LUCKNOW DECLARATION

- The first India-Africa Defence Ministers' Conclave held in Lucknow adopted the Lucknow Declaration.

About the Declaration:

- The Lucknow Declaration is signed by the defence ministers and representatives of 50 African countries with Indian defence minister (Rajnath Singh) to recognise common security challenges such as terrorism, extremism, piracy and trafficking.
- Besides that, the agreement aims to increase cooperation in securing sea lines of communication, preventing maritime crimes, disaster, piracy, illegal fishing through the sharing of information and other measures.
- Under this agreement, India will provide Offshore Patrol Vessels (OPVs), Fast Interceptor Boats, body and vehicle armour, Night Vision Goggles (NVGs), Unmanned Aerial Vehicles (UAVs), Dornier aircraft, and arms and ammunition to African counterparts

14 CONFERENCE ON COMBATING DRUG TRAFFICKING

- The government of India inaugurated the two-day 'Conference on Combating Drug Trafficking' for BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) Partner Nations, in New Delhi, organised by Narcotics Control Bureau (NCB).
- The platform aims to provide the opportunity to all the member nations to deliberate on the increased threats posed by drug trafficking and the collective steps that are required to negate the threats by learning from the best practices adopted by member countries.

The Need:

- In the changing drug trafficking scenario, Asian countries are increasingly being affected by drug trafficking and BIMSTEC, being the key link between South Asian and South-East Asian Nations is one of the most effective platforms to tackle this global threat.

The BIMSTEC is a regional organization comprising seven Member States lying in the littoral and adjacent areas of the Bay of Bengal i.e. Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka and Thailand besides India, constituting a contiguous regional unity.

- Regional maritime connectivity and trade through the Bay of Bengal are imperative for the shared prosperity and economic growth of the entire BIMSTEC region.
- However, while providing unhindered maritime access, security challenges at sea and coastlines are a threat.
- One of the most prominent of such challenges is the drug trafficking through the sea.
- It necessitates collaborative efforts at sea, including further strengthening of effective coordination in operations and information sharing amongst partner nations, to combat this menace.

Narcotics Control Bureau (NCB) is the apex agency for exercising powers and functions of the Central Government under the **Narcotic Drugs and Psychotropic Substances (NDPS) Act** and is also the nodal agency for matters pertaining to **drug law enforcement** in India. Further, NCB is also the nodal agency of the Government of India at **the international level in all matters pertaining to Narcotic Drugs & Psychotropic Substances.**

15 RAIDER-X

- RaIDer-X, a new explosive detection device, was unveiled at the National Workshop on Explosive Detection (NWED-2020) in Pune.
- RaIDer-X has been co-developed by High Energy Materials Research Laboratory (HEMRL) Pune and Indian Institute of Science, Bangalore.

Key-Features:

- RaIDer-X has the capability to detect explosives from a stand-off distance.
- The data library can be built in the system to expand its capability to detect a number of explosives in pure form as well as with the contaminants.
- Bulk explosive in a concealed condition can also be detected by the device.

16 ORDNANCE FACTORIES

- Ordnance Factories have observed their 219th foundation day today.
- The first Ordnance Factory, now known as the 'Gun and Shell Factory' at Cossipore in Kolkata was established on this day in 1801.
- The Ordnance Factories are a conglomerate of 41 ordnance factories under the aegis of its corporate headquarters Ordnance Factory Board (OFB) in Kolkata.
- The OFB came into existence on April 2, 1979 in the new avatar.
- Since their inception, the Ordnance Factories have evolved as one of the largest defence manufacturing conglomerates in the world with more than 90 per cent of indigenous content and a strong technological and R&D infrastructure that currently contributes to 25 per cent of the revenue.
- The Ordnance Factories have been catering to the needs of the Armed Forces for more than two centuries by providing them with arms, ammunition and equipment and will continue to do so in future.
- Under the agreement, around 34,000 Bru Refugees are to settle in Tripura. The Centre will offer their rehabilitation helps with an allocated budget. With this, the refugees are now eligible to enjoy social welfare schemes of state and central governments.
- According to the agreement, the displaced families are to be provided with land. The land is to be provided by the Tripura Government.

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**JOINT
EXERCISE**

1 SAMPRITI – 2019

Context:

- As part of the ongoing India-Bangladesh defence cooperation, a joint military exercise Sampriti-2019 will be conducted at Tangail, Bangladesh from 02 March to 15 March 2019.

About:

- Exercise Sampriti-2019 is an important bilateral defence cooperation endeavour between India and Bangladesh and this will be the eighth edition of the exercise which is hosted alternately by both countries.
- The exercise is aimed to strengthen and broaden the aspects of interoperability and cooperation between the Indian and Bangladesh Armies. The exercise will involve tactical level operations in a counter insurgency and counter terrorism environment under the UN mandate.
- In addition to understanding each other in tactical level operations, emphasis will also be laid for greater cultural understanding to strengthen military trust and cooperation between the two nations.

2 JOINT EX AL NAGAH 2019

Context:

- Indo Oman Joint Exercise Al Nagah III 2019, a joint military exercise between Indian and Royal Army of Oman (RAO) was held at HQ Jabel Regiment, Nizwa, Oman.

About:

- The Indian Army and RAO contingents were specifically selected for the exercise based on expertise and professional competence and took part in event that saw hone their tactical and technical skills in joint counter insurgency and counter terrorist operations in semi-urban scenario in mountainous terrain under UN mandate.
- Due emphasis was laid on increasing interoperability between forces from both countries which is crucial for success of any joint operation. Both sides jointly trained, planned and executed a series of well-developed tactical drills for neutralization of likely threats that may be encountered in such a scenario.
- Ex Al Nagah 2019 contributed immensely in developing mutual understanding and respect for each other's military as also facilitate in tackling the worldwide phenomenon of terrorism.

3 33RDIND-INDO CORPAT

Context:

- 33rd edition of India-Indonesia Coordinated Patrol (Ind-Indo Corpat) Concluded at Port Blair.

About:

- The IND-INDO CORPAT Series of bilaterals seek to underscore India's peaceful presence and solidarity with friendly Maritime neighbours countries to ensure good order in the maritime domain, consolidate interoperability and strengthen existing bonds of friendship between India and Indonesia.

- During the stay in Port Blair harbour, various activities such as official calls, formal reception onboard ship, sporting fixtures between both navies, ship open to visitors and professional interactions were done.
- Indian Naval assets have been increasingly deployed in the recent times to address the maritime concerns on the region.
- In addition, as part of the Indian Government's vision of SAGAR (Security and Growth for All in the Region), the Indian Navy has also been involved in assisting countries in the Indian Ocean Region with EEZ Surveillance, Search and Rescue, and other capacity-building and capability-enhancement activities.
- The 33rd IND-INDO CORPAT, also coincided with 70 years of India-Indonesia diplomatic ties, contribute towards the Indian Navy's efforts to consolidate inter-operability and forge strong bonds of friendship across the seas.

4**MITRA SHAKTI-VI****Context:**

- The joint exercise Mitra Shakti-for the year 2018-19 was conducted from 26 March to 08 April 2019 in Sri Lanka.

About:

- Exercise MITRA SHAKTI is conducted annually as part of military diplomacy and interaction between armies of India & Sri Lanka.
- The aim of the exercise is to build and promote close relations between armies of both the countries and to enhance ability of joint exercise commander to take military contingents of both nations under command.
- The exercise involved tactical level operations in an international Counter Insurgency and Counter Terrorist environment under United Nations mandate.
- Exercise MITRA SHAKTI-VI helped both nations in going a long way in furthering cementing relationship and acted as a catalyst in bringing synergy and cooperation at grassroots levels between both the armies.

5**LIMA-2019****Context:**

- Langkawi International Maritime and Aerospace Exhibition (LIMA) is a maritime and aerospace exhibition that takes place once every two years in Langkawi, Malaysia.

About:

- The event is one of the largest maritime and aerospace exhibitions in the Asia-Pacific.
- It is focused mainly on the defence industry, but also supports civilian industries.
- Commanding results since 1991, the event is one of the most influential shows within the maritime and aerospace industries.
- A significant gateway to the heart of the world's most dynamic market region, LIMA brings top decision makers—from senior Government officials to military and civil industry leaders—together with prominent

manufacturers and suppliers from around the globe, in creating the ideal platform where partnerships are forged and business opportunities seized.

- Its insightful roundtables, conferences and dedicated business programmes; combined with trademark air shows and maritime demonstrations make LIMA a truly comprehensive affair; an event that certainly has a priority on every industry player's calendar.
- INS Kadmatt participated in Langkawi International Maritime and Aerospace Exhibition (LIMA)-19.
- INS Kadmatt is an indigenous stealth anti-submarine warfare corvette. It was commissioned into the Indian Navy in January 2016. It is named after one of the large islands amongst the Lakshadweep group of Islands off the west coast of India.

6

AUSINDEX-19

Context:

- The third edition of 'AUSINDEX-19' (Australia India Exercise), bilateral maritime exercise between Indian Navy and Royal Australian Navy, began on April 2, 2019 with the arrival of Royal Australian Navy's fleet at Visakhapatnam.

About:

- The fleet of Royal Australian Navy includes a Landing Helicopter Dock HMAS Canberra (L02), frigates HMAS New Castle (06) and HMAS Paramatta (154); conventional submarine HMAS Collins, and Durance-class multi-product replenishment oiler HMAS Success (OR 304).
- The exercise seeks to 'strengthen and enhance mutual cooperation and interoperability between the Indian Navy and Royal Australian Navy, providing opportunities for interaction and exchange of professional views between the personnel of the two navies'.
- The third edition would involve exercises in all three dimensions with focus on Anti-Submarine Warfare Systems (ASW).
- This year, the number of participating units of both the navies in the bilateral exercise is the highest till date. This increased scale of participation signifies the importance attached to the exercise.
- The exercise emphasises on India's vision of SAGAR (Security and Growth for All in the Region) and shared objectives of the two countries towards ensuring good order in the maritime domain.

7

EX TSENTR 2019

Context:

- This year the exercise is planned between 09 September to 23 September 19 at Donguz training ranges, Orenburg, Russia.

Ministry/Agency: Ministry of Defence

About:

- Exercise TSENTR 2019 is part of the annual series of large scale exercises that form part of the Russian Armed Forces' annual training cycle.
- The series rotates through the four main Russian operational strategic commands. Russia holds a major military exercise every year at one of its four military Commands i.e Vostok (East), Zapad (West), TSENTR (Centre) and Kavkas (South).

- These annual exercises have slowly begun taking an international character, with Belarus participating in ZAPAD-2017 and China and Mongolia participating in VOSTOK-2018. This year, invitations for participation have been extended to nine other countries.
- Apart from host Russia, military contingents from China, India, Kazakhstan, Kyrgyzstan, Tajikistan, Pakistan and Uzbekistan will also take part in this mega event.
- The exercise aims at evolving drills of the participating armies and practicing them in the fight against the scourge of international terrorism thereby ensuring military security in the strategic central Asian region.
- The TSENTR-2019 strategic measures will focus on evaluating the level of troop preparedness, the acquisition of the required skills and raising the level of inter- operability and demonstrate the readiness of the participating armies.
- The exercise TSENTR 2019 will comprise two modules. The first module will include counter- terror operations, repelling air strikes, reconnaissance operations and defensive measures, while the second will focus on offensive operations.

8**28th INDO-THAI CORPAT****Context:**

- 28th edition of India-Thailand Coordinated Patrol (Indo-Thai CORPAT) between the Indian Navy (IN) and the Royal Thai Navy (RTN) is being conducted from 05 – 15 September 2019.

Ministry/Agency: The Ministry of HRD**About:**

- IN ships and aircraft of Andaman and Nicobar Command have been participating in the biannual Coordinated Patrol (CORPAT) with the Royal Thai Navy (RTN) since 2003.
- The Objectives of the Indo-Thai CORPAT are to ensure effective implementation of United Nations Conventions on Laws of the Sea (UNCLOS) which specify regulations regarding protection and conservation of natural resources, conservation of marine environment, prevention and suppression of illegal, unregulated fishing activity/ drug trafficking/ piracy, exchange of information in prevention of smuggling, illegal immigration and conduct of Search and Rescue operations at sea.
- The 28th cycle of Indo-Thai CORPAT is poised to further enhance strong bilateral ties and maritime cooperation between India and Thailand. The CORPAT is truly reflective of the strong desire for a peaceful Indian Ocean safeguarded through good maritime order in the region.

9**MAITREE-2019****Context:**

- India-Thailand joint military exercise Maitree 2019 Commences in Meghalaya

About:

- Exercise MAITREE is the annual bilateral joint exercise between Indian Army (IA) and Royal Thailand Army (RTA).
- The aim of exercise is joint training of troops in counter terrorism operations in both jungle terrain and urban scenario.
- Exercise MAITREE-2019 has been the face of long standing bilateral ties between India and Thailand since 2006.

- The 14 days exercise will be conducted under the framework of United Nations mandate. Both contingents will share their valuable experiences in the conduct of counter terrorism operations in form of lectures, drills, demonstrations and skill-at-arms with an aim to refine tactics, techniques and procedures.

10

SEA PHASE OF MAIDEN IN-RSN-RTN TRILATERAL EXERCISE COMMENCES

Context:

- SITMEX-19 (Singapore India Thailand Maritime Exercise), between Indian Navy, Republic of Singapore Navy (RSN) and Royal Thai Navy (RTN) commenced in the Andaman Sea in September

About:

- Sea Phase of maiden SITMEX-19 (Singapore India Thailand Maritime Exercise), between Indian Navy, Republic of Singapore Navy (RSN) and Royal Thai Navy (RTN) commenced in the Andaman Sea from 18 Sep 19.
- IN Ships Ranvir, a Guided Missile Destroyer, Kora, a Missile Corvette, Sumedha, an Offshore Patrol Vessel along with Long Range Maritime Reconnaissance aircraft P8I are jointly exercising with RSS Tenacious, a Formidable-class Guided Missile Stealth Frigate and HTMS Kraburi, a Guided Missile Frigate and engaged in various Gunnery, Force Protection Measures, Air Defence and Communication Exercises to enhance maritime interoperability between the participating navies.
- Sea Riders have also been exchanged between participating ships to provide experience sharing of best practices.
- Early, the harbour phase of SITMEX-19 culminated at Port Blair and included professional interaction in the form of Subject Matter Expert Exchanges (SMEE), Pre-Sail Conferences which was attended by Command teams and friendly basketball matches between joint teams drawn from participating ships. A Food Festival was also organized during the harbour phase to showcase delicacies of each participating countries.

11

EXERCISE KAZIND

Context:

- The 4th edition of annual military exercise KAZIND 2019 between India and Kazakhstan army was commenced at Pithoragarh.

About:

- The aim of exercise is joint training of troops in Counter Insurgency/ Counter Terrorism operations in both Jungle and Mountainous terrain.
- Exercise KAZIND 2019 can be termed as a facade of long standing strategic ties between India and Kazakhstan.
- As part of exercise, important lectures, demonstrations and drills related to counter insurgency and counter terrorism operations has conducted. Both the Armies also shared their valuable experiences in countering such situations and also refined drills and procedures for joint operations whenever the need so arises.

12 EXERCISE NOMADIC ELEPHANT- XIV**Context:**

- 14th edition of Indo - Mongolian joint military training, Exercise Nomadic Elephant-XIV was conducted from 05 to 18 Oct 19 at Bakloh.

About:

- Nomadic Elephant - XIV is the fourteenth edition between the two nations aimed at training troops in counter insurgency & counter terrorism operations under United Nations mandate.
- The joint exercise will enhance defence co-operation and military relations between the two nations.
- It is an ideal platform for the armies of both the nations to share their experiences & best practices and gain mutually during the joint training.
- The joint training aims at evolving various tactical drills in counter-terror environment like Convoy Protection Drill, Room Intervention Drills, Ambush/ Counter Ambush Drills, while jointly conducting counter terrorist operations under UN mandate.
- The joint training will also lay emphasis on conducting operations by a cohesive subunit, comprising of troops from both the armies, in an adverse operational conditions thus enhancing the interoperability between the two armies.
- The training planned by both the contingents will go a long way in capacity building for conducting joint operations by the two armies.
- As part of the exercise, important lectures, demonstrations and drills related to counter insurgency and counter terrorism operations will be conducted. Both the Armies will also share their valuable experiences in countering such situations as also refine drills and procedures for joint operations.

13 EX EASTERN BRIDGE-V**Context:**

- Indian Air Force is participating in a Bilateral Joint exercise with Royal Air Force Oman (RAFO), named EX EASTERN BRIDGE-V

About:

- Indian Air Force is participating in a Bilateral Joint exercise with Royal Air Force Oman (RAFO), named EX EASTERN BRIDGE-V
- The last exercise, EX EASTERN BRIDGE-IV was held in 2017 at Jamnagar.
- For the first time, MiG-29 fighter aircraft will be participating in an International Exercise outside India.
- IAF contingent comprises of MiG-29 and C-17 aircraft. MiG-29 will be exercising with Royal Air Force Oman's Eurofighter Typhoon, F-16 and Hawk.
- The exercise will enhance inter-operability during mutual operations between the two Air Forces and will provide an opportunity to learn from each other's best practices.

14

DEFENCE OF ANDAMAN AND NICOBAR ISLANDS EXERCISE 2019 (DANX-19)

Context:

- Andaman and Nicobar Command (ANC) has conducted the second edition of Defence of Andaman & Nicobar Islands 2019 (DANX-19)

About:

- Spanning over a period of five days, components of the Indian Army, Navy, Air Force and Coast Guard carried out mobilisation and field manoeuvres to validate defensive plans of Headquarters ANC towards pursuance of the Command's responsibility, namely ensuring territorial integrity of the A&N Islands.
- In addition to internal forces from ANC, accretional forces from Mainland comprising ships and aircraft, Special Forces from the newly formed Armed Forces Special Operations Division (AFSOD), also participated in this edition.

15

INDO-FRENCH JOINT EXERCISE SHAKTI-2019

Context:

- Indo-French Joint Exercise Shakti-2019 been held

About:

- Series of 'Exercise SHAKTI' between India and France commenced in year 2011.
- It's a biennial exercise and is conducted alternately in India and France.
- The bilateral training exercise will be conducted at Foreign Training Node at Mahajan Field Firing Ranges, Rajasthan.
- A contingent of the Sikh Regiment of Sapta Shakti Command will represent Indian Army in this exercise.
- The joint exercise will focus on Counter Terrorism operations in backdrop of semi-desert terrain under United Nations Mandate.
- The training will focus primarily on high degree of physical fitness, sharing of drill at tactical level and learning of best practices from each other.
- The exercise aims at enhancing understanding, cooperation and interoperability between the two Armies.

16

EXERCISE SAMUDRA SHAKTI

- INS Kamorta, an Anti-Submarine Warfare Corvette is jointly exercising with Indonesian Warship KRI Usman Harun, a multi-role Corvette in the Bay of Bengal as part of the ongoing Indian Navy – Indonesian Navy Bilateral Exercise 'Samudra Shakti'
- The joint exercises include manoeuvres, Surface Warfare exercises, Air Defence exercises, Weapon firing drills, Helicopter Operations and Boarding Operations.

17 HADR EXERCISE TIGER TRIUMPH

- In consonance with the growing partnership between India and the US, the maiden India US joint Tri services Humanitarian Assistance and Disaster Relief (HADR) Exercise named 'TIGER TRIUMPH' is scheduled on the Eastern seaboard.
- Indian Naval ships Jalashwa, Airavat and Sandhayak, Indian Army troops from 19 Madras and 7 Guards, and Indian Air Force MI-17 helicopters and Rapid Action Medical Team (RAMT) would be participating in the exercise.
- The US would be represented by US Navy Ship Germantown with troops from US Third Marine Division.
- The Exercise is aimed to developing interoperability for conducting HADR operations.

18 EXERCISE DUSTLIK-2019

- The inaugural Indo-Uzbekistan Joint Field Training Exercise (FTX)-2019, Exercise DUSTLIK-2019 culminated after 10 days of joint training with Uzbekistan Army.
- Training was focused on counter insurgency and counter terrorism operations in urban scenario as well as sharing of expertise on skills at arms; both combat shooting and experiences in counter insurgency and counter terrorism.
- The exercise also provided an opportunity to armies of all nations for greater cultural understanding, sharing experiences and strengthening mutual trust and cooperation.

19 THE ROAR OF THE SEA

- It is a Joint Exercise between the Qatari Emiri Navy and the Indian Navy Forces.
- The Exercise will include a three-day Harbour Phase and Two days Sea Phase.
- The activities during the harbour phase will include a seminar, professional interaction, official visits, 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.
- The Qatari Emiri Naval Forces participating in this Exercise include the versatile Anti-Ship Missile equipped Barzan Class Fast Attack Craft along with Rafale multi-task fighter aircraft.
- India and Qatar have traditionally enjoyed warm and friendly relation, sharing common developmental and cultural values.
- The inaugural edition of the Bilateral Maritime Exercise between the two navies would further strengthen the robust defence co-operation between the two countries, especially in the fight against terrorism, maritime piracy and maritime security.

20 SURYA KIRAN – XIV

- The 14th edition of bilateral annual military exercise SURYA KIRAN-XIV between Indian and Nepal Army commenced today at Nepal Army Battle School (NABS), Salijhandi, Rupendehi district of Nepal. The 13th edition of the joint military exercise was held at Pithoragarh, Uttarakhand in June last year.

- The aim of this exercise is to conduct a battalion level combined training between Indian Army and Nepal Army with a scope to enhance interoperability at military level in jungle warfare, counter terrorist operations in mountainous terrain, humanitarian assistance, disaster relief operations, medical and environmental conservation including aviation aspects.
- As part of the exercise, important lectures, demonstrations and drills related to counter insurgency and counter terrorism operations in jungle and mountainous terrain will be conducted. Both the Armies will also share their valuable experiences in countering such situations and also refine drills and procedures for joint operations wherever the need arises.

22 INDRA 2019

- Exercise INDRA 2019 a joint, tri services exercise between India and Russia will be conducted in India from 10 — 19 December 2019 simultaneously at Babina (near Jhansi), Pune, and Goa.
- The INDRA series of exercise began in 2003 and the First joint Tri Services Exercise was conducted in 2017, It will be a historic occasion for two of the world's greatest Armed Forces to join hands and successfully conduct an exercise of this magnitude with professionalism, to imbibe the best practices from each other, jointly evolve and drills to defeat the scourge of terror under the United Nation mandate.
- Company sized mechanised contingents, fighter and transport aircraft as well as ships of respective Army, Air Force and Navy will participate in this exercise of ten days duration. The exercise will consist of a five day training phase consisting of a comprehensive training curriculum. Tactical operations end drills such as cordon house intervention, handling and neutralisation of Improvised Explosive Devices, prevention of arms smuggling through the sea route and anti-piracy measures will be practiced.
- This training phase will be followed by a 72 hour validation exercise. INDRA 2019 will culminate on 19 December with an Integrated Fire Power demonstration and the Closing Ceremony.
- The contingents of both the countries will share expertise and their professional experience. The esprit-de-corps and goodwill shall be the key areas during the exercise which will facilitate further strengthening of bonds between the defence forces of India and Russia.

23 INDIAN NAVY'S LARGEST ANTI-HIJACKING EXERCISE

- The Indian Navy, in collaboration with Indian Coast Guard, Cochin Port Trust and all other concerned stakeholders, conducted a large scale Anti Hijacking Exercise "Apharan" off the Port of Kochi

About Apharan:

- The Exercise code-named "Apharan" was aimed at streamlining the response mechanism/ preparedness to thwart any attempt by Anti-National Elements to hijack a merchant's vessel or attempt forced entry of a rogue/commandeered merchant vessel into Kochi harbour.
- Within the ambit of Coastal Security architecture, hijacking of a merchant's vessel is one of the challenging scenarios, response to which requires a synergy of resources, assets and efforts of all stakeholders including the State Government.

24 MILAN 2020

- MILAN 2020 is a multilateral naval exercise aimed to enhance professional interaction between friendly foreign navies and learn from each other's strengths and best practices in the maritime domain.

- The Exercise with the theme 'Synergy Across the Seas' would provide an excellent opportunity for Operational Commanders of friendly foreign navies to interact with each other in areas of mutual interest.

25 EXERCISE SAMPRITI-IX

- Armies of India and Bangladesh participated in joint military exercise SAMPRITI-IX at Umroi, Meghalaya.
- As the 9th edition of the joint Exercise SAMPRITI reached its culmination day, the Head of Observer Delegations from both sides conveyed their appreciation for both the participating contingents for successfully achieving the objectives of the Exercise.
- The exercise was aimed at strengthening the military relations between the two countries, which allowed the two armies to understand each other's tactical drills and operating techniques.
- The exercise provided an ideal platform for the personnel of the two countries to share their experiences on counter insurgency, counter terrorism operations and providing aid to civil authorities for disaster management especially in jungle and semi-urban terrain.
- SAMPRITI series of joint exercise is a very important military & diplomatic initiative between both the nations and the edifice of the trust and friendship between India & Bangladesh which has been nurtured with the sweat and toil of Officers and soldiers of contingents participating in each edition.

26 VAJRA

- VAJRA is the 6th vessel in the series of seven Offshore Patrol Vessel (OPV) projects.
- It has been built by L&T Shipbuilding under the 'Make in India' policy.
- The vessel would be utilised for day and night surveillance along with anti-terrorist, anti-smuggling operations in the exclusive economic zone.
- It is empowered with two Navigation Radars along with ultra-modern technology, Sophisticated navigational and latest communication systems.

27 AJEYA WARRIOR-2020

- Exercise AJEYA WARRIOR - 2020, a joint military training exercise between India & United Kingdom (UK) culminated at West down Camp, Salisbury Plains Training Area, UK.
- The fifth edition of the exercise included joint training in urban and semi urban areas.
- As part of the exercise, important lectures, demonstrations and drills related to counter insurgency and counter terrorist operations were rehearsed and executed jointly.
- The highlight of the exercise was the Bonhomie and Camaraderie displayed by the troops, thereby ensuring integration and achievement of interoperability at all levels.
- The joint training was undoubtedly, an unprecedented success.
- Besides promoting understanding and interoperability between the two armies, it further helped in cementing ties between both the nations.

28 EX INDRADHANUSH - V 2020

- The Indian Air Force (IAF) and Royal Air Force (RAF) jointly commenced the fifth edition of Ex Indradhanush at Air Force Station Hindan.
- The focus of this edition of the exercise is 'Base Defence and Force Protection'.
- This theme is of significance considering the recent threats to military establishments from terror elements.
- Ex Indradhanush provides a platform for the IAF and RAF to share and jointly validate strategies and tactics to counter terror threats to their installations.
- The RAF team comprises of 36 specialised combatants of the RAF Regiment while the IAF will comprise of 42 combatants of the GARUD Force.
- Both sides would also exercise specialised weapons, equipment and vehicles and validate joint employability.
- Special missions would encompass Airfield Seizure, Base Defence and anti-terror operations in Urban built up zones. These exercises would include para drops from C-130J aircraft, tactical insertions by Mi-17 V5 helicopters and use of various airborne sensors.
- The IAF as well as the RAF would gain significantly from each other's operational experience, training philosophies, contemporary technologies and best practices followed.

29 IN – VPN BILAT EX

Context:

- In the backdrop of the growing maritime engagement between India and Vietnam, the Indian Navy undertook the **second edition** of the bilateral maritime exercise between Indian Navy and Vietnam Peoples' Navy at/ off Cam Ranh Bay, Vietnam from 13 to 16 April, 2019.

About:

- The maiden edition was conducted from 21 to 26 May, 2018 at Da Nang, Vietnam. The exercise was undertaken as a part of the ongoing Overseas Deployment of Eastern Fleet ships to South East Asian countries.
- IN Ships Kolkata participated in the exercise, comprising a harbour and a sea phase.
- The Indian Navy and the Vietnam Peoples' Navy have traditionally shared good relations. Conduct of the bilateral exercise on an annual basis would give a further fillip to the existing strong bilateral relation between the two countries, which elevated to the level of 'Comprehensive Strategic Partnership' after the visit of the Hon'ble PM to Vietnam.
- The Navy to Navy cooperation involves a Composite Training Programme in the fields of Submarine, Aviation and Dockyard training.
- The two countries have also signed an agreement to exchange White Shipping Information and have a running 'Information Sharing' programme.
- The Indian Navy-Vietnam Peoples' Navy Bilateral Exercise is a significant step in further strengthening mutual confidence and inter-operability as well as sharing best practices between the Indian and the Vietnam Peoples' Navies.

30**YUDH ABHYAS 2019****Contex:**

- As part of the on-going Indo-US defence cooperation, a joint military training, Exercise YudhAbhyas - 2019 was conducted at Joint Base Lewis Mc Chord, Washington, USA from 05-18 September 2019.

Ministry/Agency: Ministry of Defence**About:**

- Exercise YudhAbhyas is one of the largest joint running military training and defence corporation **endeavours** between India and USA. This **was** the 15th edition of the joint exercise hosted alternately between the two countries.
- Exercise Yudh Abhyas provides an opportunity to the armed forces of both countries to train in an integrated manner at Battalion level with joint planning at Brigade level. Multiple scenarios will be rehearsed during the joint exercise with a view to understand each other's organisational structure and battle procedures which would result in a higher degree of jointmanship that would further facilitate interoperability between the armed forces of both countries to meet any unforeseen contingency across the globe. The exercise is also an ideal platform to learn from each other's expertise and experiences of planning and execution of operations.
- Both armies jointly train, plan and execute a series of well-developed operations for neutralization of threats of varied nature.



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